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**A new business model renewal process:  
A framework utilizing collaboration with external  
experts**

Master's Thesis

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<p>The objective of this study was to create a new framework for the business model renewal process. The framework can be used by external experts and managers of a small to medium sized enterprise. The framework includes key steps, critical success factors, and resources needed in the business model renewal process. The framework is most suited for companies having external pressure to change and looking for a new service.</p> <p>To reach the objectives, the business model renewal processes of two case companies were studied. The case companies took part in projects called ArvoBusiness and InnoBusiness. In these projects their business models were renewed by external experts from different research units in Finland together with company managers. Several semi structured interviews were conducted with the managers of the case companies and the external experts. The analysis of the interviews together with a data set covering presentations and memos of the case companies resulted in knowledge about factors enhancing and hindering the business model renewal process. The lessons learned from the studied two cases of business model renewal and the comparison to the business model renewal literature formed the basis for the new framework.</p> <p>The new framework of the business model renewal process includes four main phases: 'Participation', 'Preparation', 'Business model development', and 'Follow-up'. The 'Participation' phase consists of the following steps: external pressure, need for a new business model, and initial interviews. In the 'Preparation' phase of this framework the history, current state and the future of the company are analyzed in a number of workshops. Simultaneously, there should be active targeting and contacting of pilot customers. In the 'Business model development' phase several workshops should be conducted, depending on the resources of the process and the nature of the case. The themes of the workshops are defined individually for each case company. Between the workshops there should be constant experimentation, and workshops should be used to discuss the results of those experimentations and make the changes accordingly. The 'Follow-up' phase ends the process. During this phase the managers are implementing the new business model in full scale and the external experts give guidance if needed.</p> <p>The objective was met by creating a new business model renewal framework with key steps, critical success factors and resources. The new framework provides one solution to the business model renewal literature. Similar approach was used in the two studied cases, which produced two new promising business models with preliminary yet clearly successful results in form of new significant clients.</p>		
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<p>Tämän diplomityön tavoitteena oli kehittää uusi viitekehys liiketoimintamallin uudistamisprosessille. Uusi viitekehys tulee ulkopuolisten asiantuntijoiden sekä pienten ja keskusurten yritysten johtajien käyttöön. Tavoitteena oli, että viitekehys sisältää prosessin tärkeimmät vaiheet, kriittiset kohdat ja resurssit. Viitekehys sopii parhaiten sellaisille yrityksille, jotka kokevat ulkoista painetta muuttua ja ovat etsimässä uutta palveluliiketoimintaa.</p> <p>Päästäkseen tavoitteisiin työssä tutkittiin kahden yrityksen liiketoimintamallin uudistamisprosessia. Yritykset olivat mukana ”ArvoBusiness”- ja ”InnoBusiness”-projekteissa, joissa ne yhdessä ulkopuolisten, suomalaisten tutkimusyksiköiden asiantuntijoiden kanssa uudistivat yritysten liiketoimintamallin. Tutkittujen yritysten johtajille ja ulkopuolisille asiantuntijoille järjestettiin useita puolistrukturoituja haastatteluja. Haastatteluanalyysi ja tutkimusaineisto, joka piti sisällään projektien esitykset ja muistiot, tuottivat tietoa uudistusprosessia parantavista ja huonontavista tekijöistä. Molempien projektien tarjoamat kokemukset sekä vertailu kirjallisuuteen tarjosivat pohjan uudelle liiketoimintamallin uudistamisviitekehyselle.</p> <p>Uudessa liiketoimintamallin uudistamisprosessin viitekehyksessä on neljä päävaihetta: osallistuminen, valmistelu, liiketoimintamallin kehittäminen ja seuranta. Osallistumisvaiheen osat ovat seuraavat: ulkoinen paine, tarve uudelle liiketoimintamallille sekä alkuhaastattelut. Valmisteluvaiheessa yrityksen historia, nykytila ja tulevaisuus analysoidaan muutaman työpajan avulla. Näiden työpajojen rinnalla tulisi tapahtua aktiivista pilottiasiakkaiden etsimistä ja yhteydenottamista. Liiketoimintamallin kehittämisvaiheessa järjestetään useita työpajoja riippuen projektin resursseista ja tapauksen luonteesta. Työpajojen teemat päätetään jokaisen projektin kohdalla erikseen. Yritysten avainhenkilöiden tulisi tehdä pilottiasiakkaan kanssa jatkuvaa kokeilua työpajojen välillä, ja keskustella tuloksista seuraavassa työpajassa ulkopuolisten asiantuntijoiden kanssa ja tehdä muutokset tarvittaessa. Seurantavaihe päättää projektin. Yrityksen avainhenkilöt ottavat uuden liiketoimintamallin käyttöön koko yrityksessä tämän vaiheen aikana ja ulkopuoliset asiantuntijat ohjeistavat tarvittaessa.</p> <p>Työn tavoitteeseen päästiin tarjoamalla uusi viitekehys liiketoimintamallin uudistamisprosessille pitäen sisällään prosessin tärkeät vaiheet, kriittiset kohdat ja resurssit. Viitekehys tarjoaa uuden vaihtoehdon liiketoimintamallin uudistamiskirjallisuudelle. Samankaltaista lähestymistapaa käytettiin kahdessa tutkitussa projektissa, joiden uudet liiketoimintamallit ovat jo alustavasti antaneet lupaavia tuloksia merkittävien uusien asiakassuhteiden muodossa.</p>		
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*Olli Immonen*

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# 1 Introduction

## 1.1 Background

Business model as a concept is relatively new. The concept emerged as a result of the boom of e-businesses in the mid-90s. Since the birth of the business model concept, there has been relatively little research on business model development processes or business model innovation processes. However, several authors identify similar themes that are important for such process and change in general. Examples of these are experimentation, effectuation, collaborative working and change management.

This master's thesis has been done as a part of two research projects called 'ArvoBusiness' and 'InnoBusiness', which were funded by Tekes together with participating companies. 'ArvoBusiness' and 'InnoBusiness' were organized to increase the ability of change of the participating companies in order to develop new businesses and innovative, sustainable products and services. After the projects, the companies should have had mechanisms and processes which enable the companies to recognize new customer needs and customer value and thus, new business opportunities. All this was done while taking into account the possibilities of the new technologies, opportunities and requirements of sustainable development.

The research units organizing the projects were

- Business, Innovation, Technology research center, Aalto Design Factory and Department of Mechanical Engineering from Aalto University
- LUT Laser from Lappeenranta University of Technology
- Department of Production Engineering from Tampere University of Technology
- University of Turku, Centre for Collaborative Research (Turku School of Economics) and
- VTT Technical Research Center of Finland.

The research units have different core skills and knowledge related to different ways of creating new innovations. Their skills cover recognizing new business opportunities, creating business model innovation, creating product and service

innovation and application. Different companies received different kinds of renewal and development services depending on the needs of the companies, and different experts worked in different cases according to the skills of the specific research unit.

Two of the participating companies were studied in this master's thesis. The outcomes of the studied cases were new business models. The experts acted as both practitioners and researchers during the projects: in the workshops organized for the managers, experts gave guidance and developed the new business model together with the managers. Therefore, they acted as practitioners. Between the workshops the experts also produced research articles together with preparation of the next workshop and working on the business models.

Both of the participating companies managed to create a promising new business model. The implementation phase of the models is well underway, and the early results and the attitude of the managers suggest the new business models to have a promising future.

## **1.2 Objective**

The literature of the business model renewal process is relatively young. Previously only a few business model renewal processes have been proposed, and the literature lacks generalized frameworks.

The objective of this study is to develop a new framework of the business model renewal process. The new framework utilizes external experts with different backgrounds. The framework is applicable at least for small to medium sized enterprises, which are looking for a new service-based product. With this framework the business model is renewed by conducting workshops. The framework also provides help for managers and external experts in the early parts of the business model renewal process up to the point where the new business model will be implemented in full scale. The framework includes key steps in the collaborative business model renewal process. For each of the key steps, critical success factors and resources needed are identified. Critical success factors help the managers and the external experts to plan and follow the process better: on what the managers and external experts should focus their effort on in order to increase the chances of success. The resources here are related to time and people: for each of the key steps



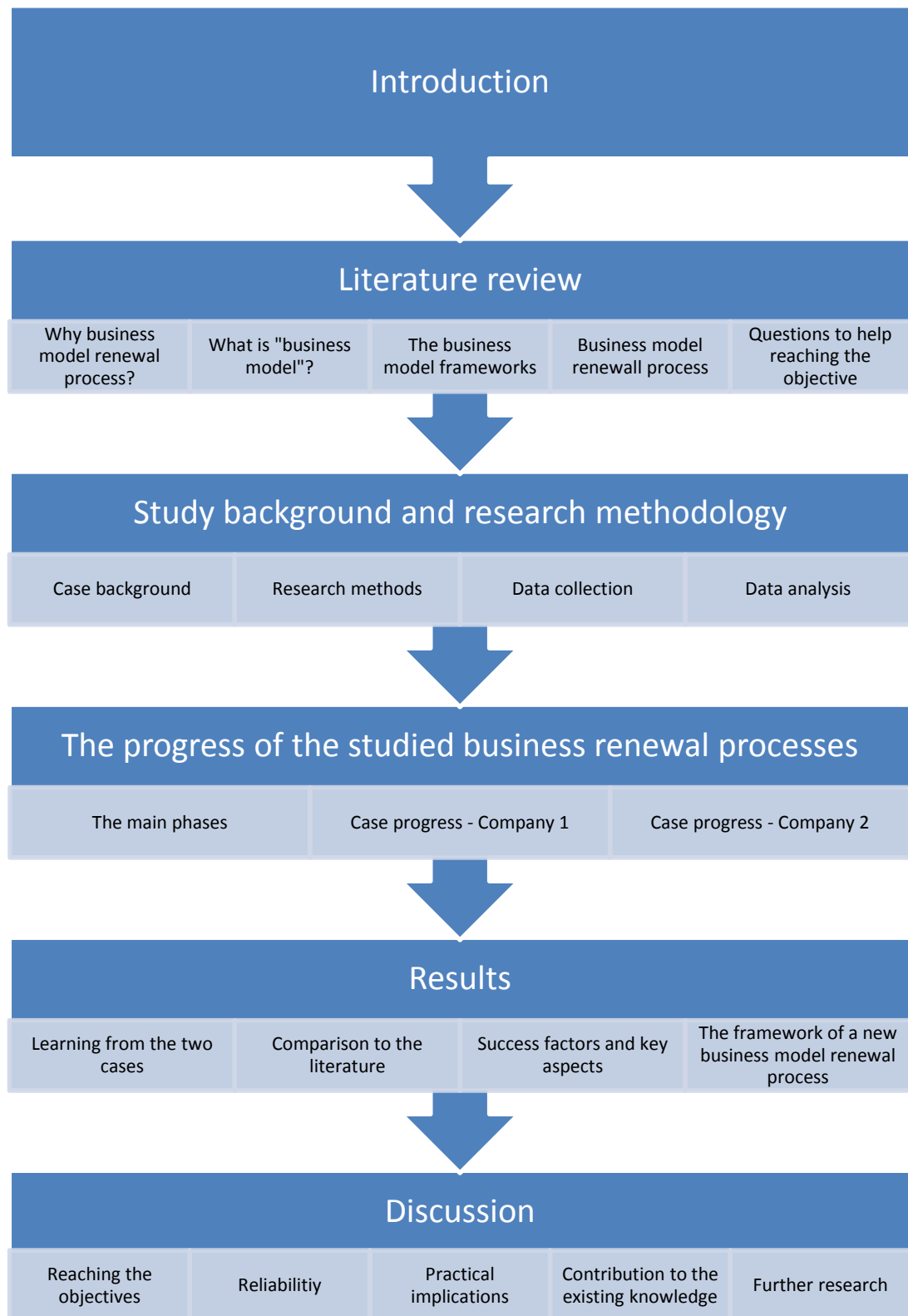
estimates of the minimum and maximum time needed are given and recommendations are presented on how many external experts and company representatives should be included.

### **1.3 Work**

In order to achieve the objectives of the study, the progress of the business model renewal of the two case companies in the ‘ArvoBusiness’ and ‘InnoBusiness’ projects will be explored. Several semi-structured interviews will be conducted. There are two groups of interviewees: On the one hand, external experts, who were working with the two case companies and their key people, and on the other hand, the key people of the case companies themselves. The interviews will be informal and the grounded theory approach (Corbin & Strauss, 1990) will be used. The results of the interviews will also be reflected to the literature and the two case companies are compared with each other. The interview results, data provided by the external experts, the literature reflection and company comparison provide the basis for creating the new framework of the business model renewal process.

### **1.4 The structure of the thesis**

This thesis starts with a literature review, in which the term ‘business model’ and different ‘business model frameworks’ are defined, key characteristics of business model processes are identified, and research questions proposed. Next, the background of this study and research methods used in this thesis are explained. Next, the two cases studied in this research are explained followed by the results. Finally, the study is discussed. The structure of the report is summarized in Figure 1.



**Figure 1 The Structure of the thesis**

## **2 Literature review**

### **2.1 Why business model renewal process?**

A lack of formal study of the processes of business model development is one of the reasons why growth obtained from business model innovation is so hard and stories of business model innovation from large companies are rare (Johnson, et al., 2008). Business models have become increasingly significant (for example: Serrat (2012); Morris, et al. (2005); Hedman and Kalling (2003)), yet little effort has been made on the business model innovation or development process. Sosna et al. (2010) say:

*“We hope that the Business Model Innovation Process can be further developed and made more generalizable as similar studies are carried out in other contexts.”*

This study is made to complement the current literature of the business model innovation process. This master’s thesis is a study on business model innovation process based on a research project, in which a new business model was designed for two case companies by managers and external experts from different research units in Finland. This thesis uses the terms ‘business model renewal process’, ‘business model innovation process’, ‘business model development process’ and similar, which basically mean the same concept with slightly different tones and concentration areas. The term business model renewal process is the main term used in this study. The study concentrates on two small to medium sized enterprises, whose old business models started to become outdated and inefficient. Their businesses were renewed by the external experts.

## 2.2 What is ‘business model’?

Before the internet boom in the mid 90-s, many companies operated in a similar manner: providing different products or services to customers. As the deregulation process and the technological change around the world took place, it was natural that the business models became more important. New ways of differentiating from competitors, other than just the different functions of the offering, were needed. (Serrat, 2012) Business models, however, have existed longer than the emergent of the scientific concept, as earliest ‘business model’ theme known as a Guild system arrived in the mediaeval times. (Baden-Fuller & Morgan, 2010)

Business models are many times confused with strategy. While there are similarities, they are two different concepts. Chesbrough and Rosenbloom (2002) say that business models concentrate more on creating and delivering value, and strategy is more about value capture than sustainability. In business models the value creation concentrates on the value on the business itself, but in strategy the value concentrates on the shareholder value. Also, in strategy, the possible current and future threats are more central than in business model. Casadesus-Masanell and Ricart (2001) use a metaphor:

*“Strategy is designing and building the car, the business model is the car, and tactics are how you drive the car.”*

So business model forms the basis for actions as a tool to get to the desired destination that is stated by strategy. If the strategy on a trip is to get to destination as fast as possible with no limits, the car should be a Ferrari or Lamborghini. On the other hand, if the purpose of a trip is to have a journey with more people with no schedule enjoying the scenery and the trip itself, the optimal car would be a normal station wagon or similar. Therefore, different strategies may require different business models, even though they might appear similar on the surface.

A good business model is valuable for any organization, regardless of the size or the age of the firm (Magretta, 2002). Researchers have not always agreed on what the term ‘business model’ means and it is used very loosely (for example: Skarzynski and Gibson (2008); Mullins and Komisar (2009)). Depending on the background of the researcher the topic has been mainly studied in three major silos. These silos are

- 1) *e-business and the use of IT in organizations,*
- 2) *strategic issues (value creation, competitive advantage, and firm performance)*  
*and*
- 3) *innovation and technology management.*

However, similarities in all of these silos appear: researchers agree that business model is the new unit of analysis to the product, firm, industry or network levels. Business model also emphasizes a holistic approach of business doing and its important parts are the organizational activities. In addition, business model tries to answer both value creation and value capture. (Zott, et al., 2010)

Table 1 describes more different business model definitions. Table 1 is based on Baden-Fuller and Morgan (2010) with slight changes and additions. As different definitions for the business model concentrates on different characteristics of the business model, there are different classifications for them (Baden-Fuller & Morgan, 2010). The definitions in Table 1 include direct quotes from different articles, which are marked in italic with apostrophes, and definitions adapted from other articles.

The definition of ‘business model’ used in this study is based on the Osterwalder and Pigneur (2010) and Skarzynski and Gibson (2008). This definition was used, because the ‘business model canvas’ (Osterwalder & Pigneur, 2010) was used by the external experts in both of the studied case companies. In addition, their focus on development of case companies was an overall rationale of the business making, not just how to turn an idea into revenues and profits. The value concentrated also on the business itself and not on the shareholder. To conclude, the definition for the business model used in this study is:

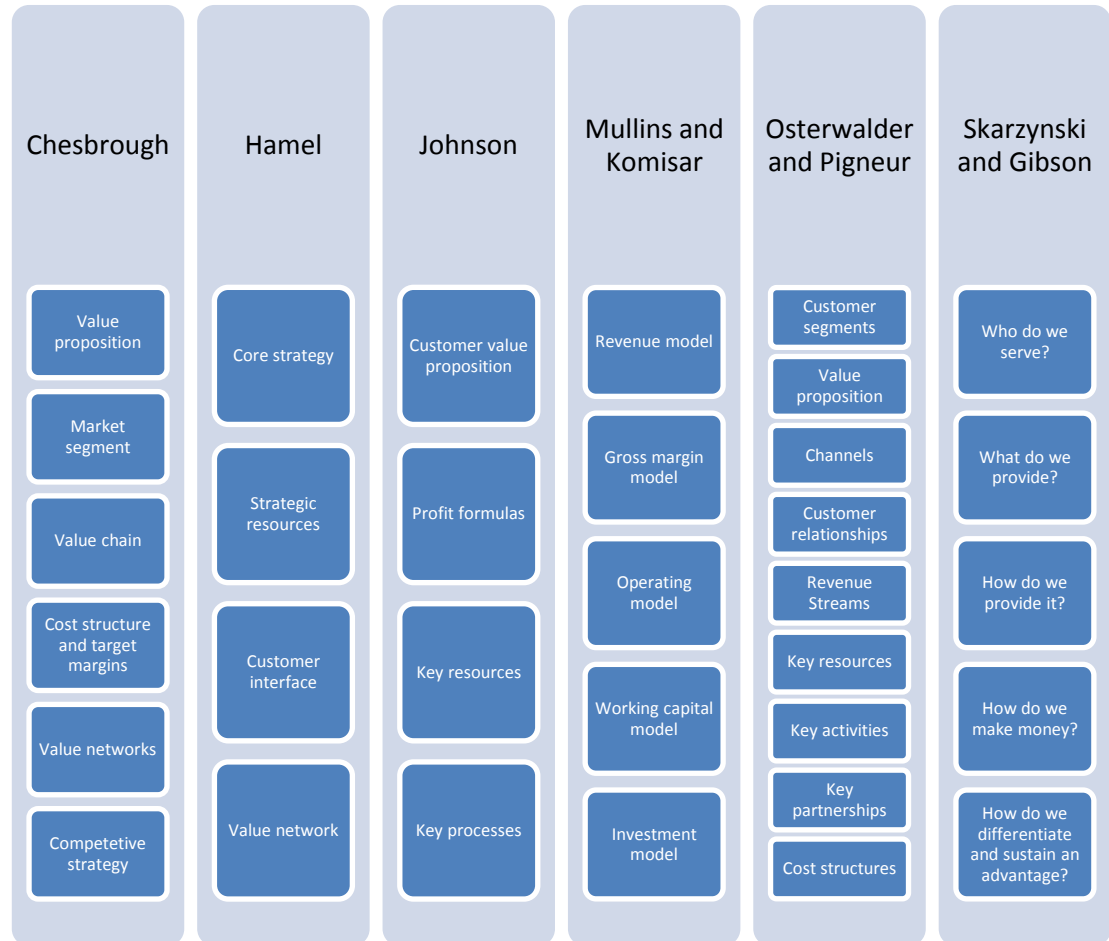
*”Business model describes the rationale of how an organization creates, delivers, and captures value.” (Osterwalder & Pigneur, 2010), (Skarzynski & Gibson, 2008)*

**Table 1 Business model definitions (adapted from Baden-Fuller and Morgan, 2010)**

<b>Author</b>	<b>Definition</b>
Teece (2010)	“how a firm delivers value to customers and converts payment into profits”
Zott and Amit (2010)	“... a system of interdependent activities that transcends the focal firm and spans its boundaries”
Williamson (2010)	cost innovation business model offers advantages in radically new ways meaning more for less
Gambardella and MacGahan (2010)	Business model is a mechanism for turning ideas into revenue at reasonable cost
Itami and Noshino (2010)	“... business model is a profit model, a business delivery system and a learning system.”
Yunus, Moingeon and Lehmann-Ortega (2010)	A value system plus a value constellation
Casadesus and Ricart (2010)	“The logic of the firm, the way it operates and how it creates value for its stakeholder”
Demil and Lecoq (2010)	The way activities and resources are used to ensure sustainability and growth
Sabatier, Rousselle and Mangematin (2010)	Cross roads of competence and consumer needs
Osterwalder and Pigneur (2010), Skarzynski and Gibson (2008)	”Business model describes the rationale of how an organization creates, delivers, and captures value.”
Chesbrough and Rosenbloom (2002)	“role of the business model is to make sure that the value is delivered to customer from the technological core of the innovation.”

## 2.3 The business model frameworks

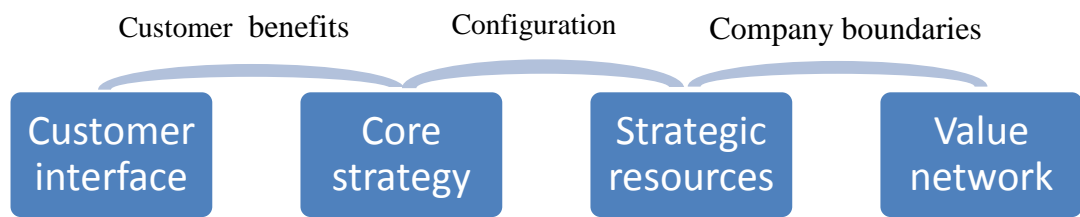
Serrat (2012) has created a summary of different elements of business models from different authors (Figure 2). The business model frameworks are tools to help to understand the definition of the business model more easily. They are more practical than standard definitions when designing a new business model.



**Figure 2** Key elements of a business model (adapted from Serrat, 2012)

Theory from Chesbrough (2007a) describes business model as the combination of six factors. One of the benefits is that each of the six factors identifies where a new innovation might generate new value in an industry. The factors are value proposition, target market segment, value chain, revenue mechanisms, value network and competitive strategy. Instead of comprising all of these factors, one can create success by being excellent in one of the factors. Chesbrough (2007a) uses an example of each factor. For example, the target market innovation by Ryan Air and the value chain innovation by Wal-Mart being two examples.

The second business model framework in Figure 3 (Hamel, 2002) uses four stones to form the overall picture of the business model. The model aims to help managers to recognize with intuition how their business operates. The author describes it to be “comprehensive, but simple”. The four blocks are: ‘customer interface’, ‘core strategy’, ‘strategic resources’, and ‘value network’. The model tries to eliminate blind spots that managers could have on their own businesses. The blocks are connected with three different bridges: ‘customer benefits’ bridge connects the customer interface with core strategy, ‘configuration’ bridge connects the core strategy with strategic resources, and finally, ‘company boundaries’ bridge connects the strategic resources with value network. The basis for these blocks is formed by efficiency, uniqueness, fit, and profitability accelerators, which determine the ability of a company to create profits.



**Figure 3 Business model framework by Hamel (2001)**

The customer interface includes fulfillment and support, information and insight, relationship dynamics and pricing structure. This is connected to the core strategy by the bridge ‘customer benefits’, meaning all the benefits that are offered to a customer, and it synchronizes the core strategy according to the needs of a customer. The ‘core strategy’ block consists of business mission, product-market scope, and the basis for differentiation. Business mission explains the overall goal of a company, product-market scope where the company competes, and differentiation how it competes. The strategic resources provide competitive advantages. Changing the resources needed in a certain competition can provide a new innovative business model concept. The core strategy block is connected to the strategic resources with the configuration bridge, meaning how the different strategic resources are allocated according to the core strategy. The strategic resources block contains core



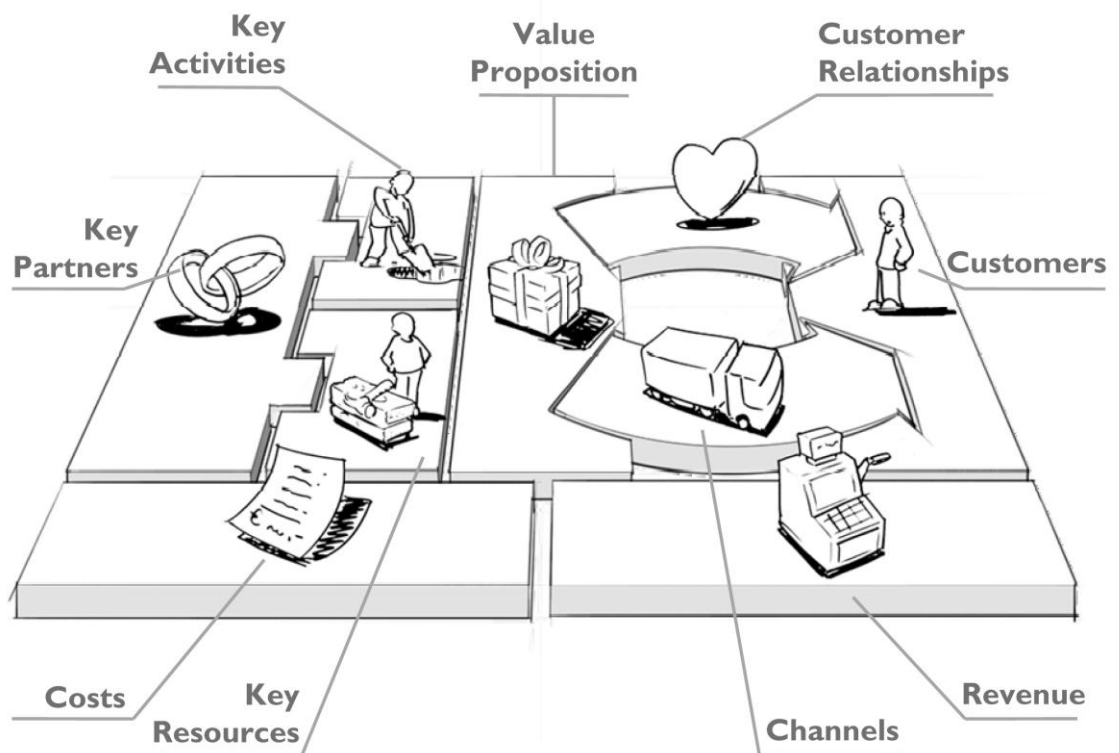
competencies, strategic assets, and core processes. This block is connected to the value network block with the company boundaries bridge, which tells what the company does and what is done by other players in the value network. The value network includes all the suppliers, partners and coalitions.

The model by Johnson (2010) has four interlocking elements. If these elements are put together, they create and deliver value. The first element is the customer value proposition, which means the help a company offers for a problem customers have. The customer value proposition depends on the importance of the problem, satisfaction of the current solutions, the superiority of the solution compared to the current solutions, and price. The second element is profit formula, which describes how the value is captured while the value is delivered to the customer. It includes revenue model, cost structure, margin model, and resource velocity. Third element is the key resources, which are all the assets that create value for the customer and the company, and how they interact with each other. The last element is the key processes, which are the repeatable processes that can be used to provide value over and over again in larger size. All these elements form the logic of the business making of any company. The first two elements concentrate in value creation for both the customer and the company, while the last two concentrate in value delivery.

Mullins and Komisar (2009) use the five elements seen in Figure 2 to examine the economic viability of a business model. The elements are 'Revenue model', 'Gross margin model', 'Operating model', 'Working capital model', and 'Investment model'. These help the entrepreneur to reduce risks of failures by getting the good ideas from already established models and identifying the questions that are untested. The model concentrates highly on the money-making side of the business, as every block in the model is used to determine how much cash is coming in and going out. These blocks are then compared to the four steps of testing a new business model: analogs, antilogs, leaps of faith, and dashboards.

The business model framework by Osterwalder and Pigneur (2010) proposes a way of creating a business model and how to understand the business better. The so called 'Business Model Canvas' is made of nine basic building blocks. These blocks are the aspects a designer of a new business model needs to take into account. Figure 4

describes the Business Model Canvas built from the nine blocks. In the middle of the canvas there is the basis of the business model: the 'Value proposition. To the left of the canvas there are blocks related to efficiency, which are 'Key partners', 'Key activities', 'Key resources', and 'Cost structure'. To the right of the canvas there are blocks related to value adding activities/sections, which are 'Customer relationships', 'Channels', 'Customer segments' and 'Revenue streams'. The business model aims to improve both the increased value of the offering and the efficiency of the operations, and thus giving the most value to the customer and the company.



**Figure 4 the Business Model Canvas (Osterwalder & Pigneur, 2010)**

The model by Skrazynski and Gibson (2008) is based on the model from Hamel (2002) providing a blueprint for transforming the innovation processes of a company and argues it needs to become a core part of any company. A new business model can be innovated by thinking at the five questions mentioned in Figure 2, and whether there are opportunities that rest of the companies in the industry ignores. The five questions are "Who do we serve?", "What do we provide?", "How do we provide it?", "How do we make money?", and "How do we differentiate and sustain advantage?" The last question distinguishes the framework from others, as it tries to

make a business so that it can not be easily copied. The model needs to have a whole series of complementary value creating components, making it hard to copy.

The term value is involved in almost every model, however, in different ways. Mullins and Komisar (2009) do not highlight the value in the model itself, but 'operating model' describes how value is delivered and 'revenue model' and 'gross margin model' how value is captured. In addition, most of the frameworks take into account the money creation rationale. The model by Hamel (2001) gives it the least attention, but the others highlight it in their models.

## **2.4 Business model renewal process**

### **2.4.1 Renewal characteristics**

A business model needs to be renewed every now and then. The business models of successful companies transform into more and more stable business models, but at the same time their rigidity increases. Many of the companies fail because they keep operating in the same way even after an environmental change, which is caused partially by the rigidity. In a rapidly changing world companies need to change their business models more quickly and more frequently than before. (Doz & Kosonen, 2010)

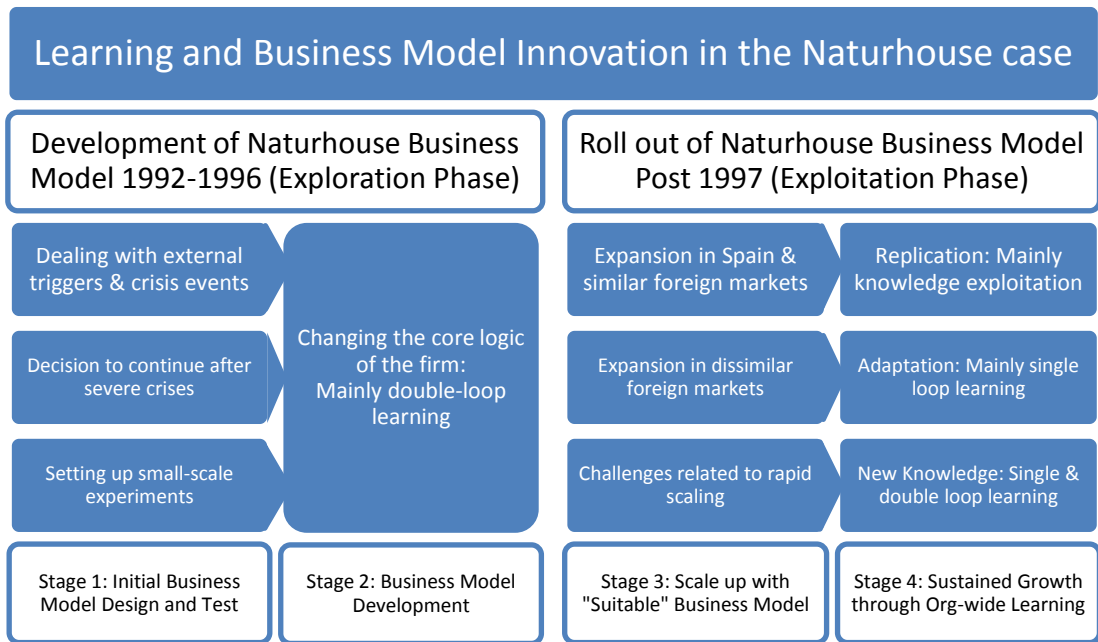
Knowing when to renew the business model is a competitive advantage. The renewal process is usually harder than creating a new model for a start-up for instance, because established companies need to deal with organizational inertia and other lock-in effects caused by previous activities. Also, a new business model can damage the existing model, either intentionally or unintentionally, which causes extra effort for managers. (Sosna, et al., 2010) Chesbrough and Rosenbloom (2002) state similar disadvantages, and add that start-ups are less constrained when they evaluate alternative models.

There are two ways of creating a new business model: one can find entirely new business models, or develop the business model already in use. One should constantly look for both of these options, not just concentrate on the other (Skarzynski & Gibson, 2008). When designing a new business model one should follow four steps, according to Mullins and Komisar (2009). First, one should find

‘analogies’ in different industries, which could be used in their own business. The designers of a new business model should not re-invent the wheel. The second step is to find ‘antilogos’ meaning the ways to be different from other companies. Next, the ‘leaps of faith’, the untested issues in the business model, should be found and tested. While the testing is occurring, developers should have a ‘dashboard’ to help monitoring and learning from the experimentation, which is the final step.

Another renewal process has four phases, which has a much broader scope (Figure 5) (Sosna, et al., 2010). The model starts with designing initial concepts and testing. After the initial designs have been established, the actual business model development phase starts. In this phase, mainly the double-loop learning method is used to test and change the initial small-scale model. After a suitable business model has been identified and proved to be working as a small scale model, the model is scaled up in the market the company is operating. The last phase is seeking sustainable growth through organizational learning. The process proposed here is based on a case study, in which the Spanish company Naturhouse was studied. Compared to the innovation process by Mullins and Komisar (2009), there are many similarities, and experimentation seems to play a major role in both of these processes.

The double-loop learning mentioned in Figure 5 is a process related to organizational learning. Organizational learning “is a process of detecting and correcting error”. In single-loop learning the process of detecting and correcting the error enables the organization to continue operating in the same way as before. The double-loop learning means not only correct the error, but it also questions the current way of working. Double-loop learning is, therefore, important in the business model renewal process, because the managers do not know whether the current way of operating is good or not. (Argyris, 1977)



**Figure 5 Business model innovation process (adapted from Sosna, et al., 2010)**

When companies have created a new business model, they have to figure out what to do with the existing model. It can be tricky to manage both the new and the old business model. Experimentation can help with choosing the right business model. If a new model is chosen, the model is being scaled into high volume across the organization and the customers, which includes two key elements: the model must be adjusted to handle large volumes, and it must obtain a 'buy in' from important constituencies before it is spread to the entire organization. (Chesbrough, 2007b)

#### **2.4.2 The role of experimentation**

Experimentation gets overwhelming support in the literature. In addition to the Mullins and Komisar (2009) and Sosna et al. (2010), Baden-Fuller and Morgan (2010) has collected different kinds of business model experimentations that different authors have studied (Table 2). Experimentation can be done through thought experimentation, experimentation on schematic models, or managers experimenting with their new models in the real life context.

Chesbrough (2007b) says companies should encourage open experiments, and companies need to be willing to act upon the information they get from those experiments. Chesbrough (2010) later refers to business model frameworks and highlights the Osterwalder and Pigneur (2010) and IBM's component business modeling framework. With the frameworks companies can construct experiments by doing alternative combinations. The maps themselves do not promote innovation and experimentation, but are, nevertheless, useful to describe the business models. Managers need processes and enough authority to undertake the experiments and actions according to the feedback of the experiments. Mullins and Komisar (2009) advise the use of a 'dashboard' to track and guide the development experiments.

**Table 2 Different articles on business model experimentation (adapted from Baden-Fuller and Morgan, 2010)**

<b>Author</b>	<b>Company examples</b>	<b>Kinds of experimentation</b>
Sosna, Trevinyo-Rodriguez and Velamuri (2010)	Naturhouse	Deliberate real experiments by managers with new business models to change business
Svejenova, Planellas and Vives (2010)	Ferran Adrià and elBulli restaurant	Deliberate real experiments by the entrepreneur to create new business models
McGrath (2010)	Freemium models, Google	Deliberate real experiments by managers to embed business models into the firm
Doz and Kosonen (2010)	Mental models of managers	Thought experiments by managers to create new business models for existing businesses
Chesbrough (2010)	3Com, Radiohead	Experiments by managers that were partly planned and partly not, partly schema and partly real firm based
Dahan, Doh, Oetzel and Yaziji (2010)	Corporate/Non-governmental organization collaborations	Experiments by managers on different non-governmental organization collaborations to develop social business models.
Wirtz, Schilke and Ullrich (2010)	Web 2.0 Busines Models: Wikipedia, MySpace	Thought experiments by academics linking Web 2.0 phenomena to changes in internet firms' business models
Thompson and MacMillan (2010)	New businesses for social wealth creation	Thought experiments by academics and real project experiments to create business models for new and societal wealth markets
Smith, Binns and Tushman (2010)	USA Today, analogue devices	Experiments by managers and academics in balancing exploitation and exploration

Certain processes are related to experimentation. Chesbrough (2010) identifies three parameters that determine good experimentation referring to Thomke (2003): First, the direct cost of conducting the test and the cost of failure. Second, the feedback time needed to do the experiment. Third, the amount of information acquired from the test. Thomke also distinguishes the terms 'failure' and 'mistake'. Failure is more useful than mistake, because failure is a natural outcome of an experiment and can be learnt from, whereas mistake is poorly designed experimentation. The best way of experimentation is to set up

*“processes that provide high fidelity as quickly and cheaply as possible, aiming to gain cumulative learning from a series of failures before discovering viable alternative business models.” (Chesbrough, 2010)*

Discovery-driven planning, rather than analytical approach, works for the business model experimentation. The core premise for it is the ability to plan the business model minimizing the expenses and maximizing the learning. The idea is to project in the future as far as possible with the current state of existing knowledge. (McGrath, 2010)

### **2.4.3 Effectuation**

Effectuation is another concept that is related to business model development through experimentation (Chesbrough, 2010). Sarasvathy (2001) argues that the creation of artifacts such as firms and markets requires the term effectuation. It means the processes in which any target is pursued with the available methods and tools. This is contrary to causation processes, in which the target is agreed and the more important part is to focus on selecting the right methods and tools from a large pool. He uses several examples that illustrate the different concepts: for example, a painter can be asked to draw a picture of a landscape and the painter can choose from a variety of paints, brushes and so on (causation). The opposing example is a painter who is given some paint and a blank canvas, and asked to paint whatever he or she likes. The choices in these two concepts are made on different parts of the process: in effectuation, the choices are related to question “what to do with these?” and in causation, the choices are related to question “how to do this in order to get the desired outcome?”

In effectuation processes related to business model renewal, the managers do not analyze too much the environment, but take actions with the information they have, indicating a bias for action over analysis. Taking action provides more data, which the managers are normally lacking. (Chesbrough, 2010)



#### 2.4.4 Open innovation and collaborative working

Companies are managing innovations nowadays in a more and more open process. Companies must look for external ideas and use external technologies to get most out of the new trend of innovation. In addition, it helps the current situation of higher development costs and shorter product life cycles leading to innovation that is more difficult to invest in. In open innovation the costs can be lowered by leveraging external R&D resources in order to save time and money, and by having new revenue opportunities. This is illustrated in Figure 6. (Chesbrough, 2007b)

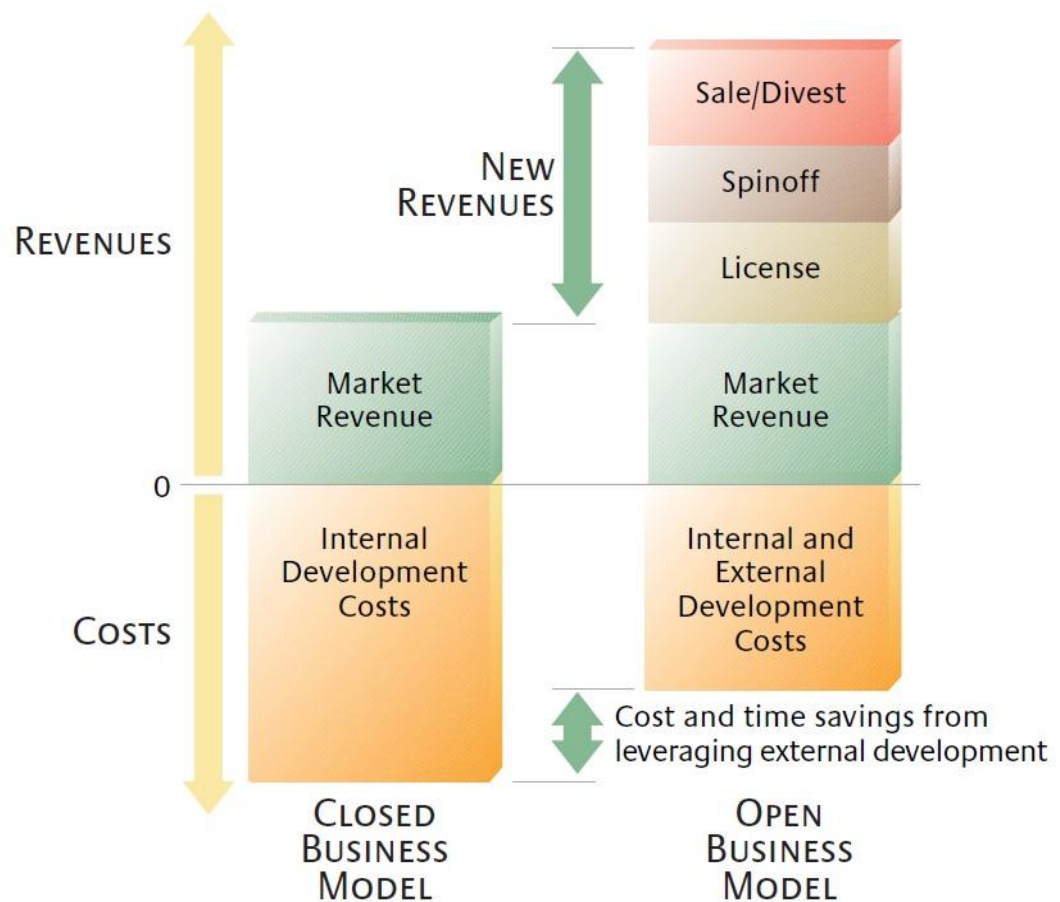


Figure 6 Benefits of open innovation (Chesbrough, 2007b)

Creating new ideas and innovations in inter-firm networks can drive the change (Arias, 1995). In addition, study done by Gumusluoglu and Ilsev (2009) suggests that the transformational leadership needed in the business model change is higher when an organization gets more external support. Also, the amount of multidisciplinary people has an indirect positive effect through information sharing on product

innovativeness, and a direct positive effect on time efficiency of new product development teams (Park, et al., 2008). These reasons suggest that collaboration with third parties is essential in the business model innovation processes.

Given the multidisciplinary nature of the business models, which includes aspects of economic studies, technology studies, social science et cetera, the business model should be developed with experts of different fields. In an interaction with designers and customers, wishes of the customers overlap with what the designers think the customer wants and what the customer thinks the customer wants. In order to maximize this intersection together with other relevant stakeholders, multidisciplinary collaboration is needed. (Valjakka, et al., 2012)

Three possible aspects in cross-profession collaboration determine the success of the collaboration. These are collaborative team characteristics, collaborative environment characteristics and collaboration process. Team and team member characteristics has three indicators that predict the success of the collaboration. These are project relevant skill and knowledge, collaboration skill and attitudes and motivation. (Amabile, et al., 2001)

#### **2.4.5 Business model innovation barriers and leading the change**

Another aspect that is important in business model renewal is the process of change leadership, because the new business model can be seen as ‘unfamiliar’ by personnel in a company (Chesbrough, 2010). Transformational leadership has been recognized to have significant positive influence on organizational innovation not only in large firms, but in micro and small firms as well (Gumusluoglu & Ilsev, 2009). When making major changes to the business model, the top managers need to show commitment and support for the new model. Managers need to build momentum by giving evidence to employees that the change in the business model is what they need. (Chesbrough, 2007b).

There are some barriers to business model innovation, and dealing with them needs change leadership. Previously the barriers were identified as “including conflicts with existing assets and business model, as well as cognition in understanding these barriers” (Chesbrough, 2010). Amit and Zott (2001) identify novelty, lock-in, complementarities and efficiency to be important elements in the business model

innovation, but they can create friction with already existing assets. The managers of these assets may be reluctant to give those assets to experiments, if it threatens the current value to the company.

Companies find it hard to remain on top even if the company is perfectly managed, as the change of markets and technology create turbulence (Christensen, 2007). Chesbrough and Rosenbloom (2002) argue that the current business model performing well dictates what information goes to decision processes in different corporates, which is built on the dominant logic concept by Prahalad and Bettis (1995). While the dominant logic helps to keep the company on the right track and concentrate on things that are valuable for them, it can make the company blind for the new opportunities. Whatever the barrier to business model innovation is, the way to overcome the barriers is experimentation commitment. However, it is not enough alone. (Chesbrough, 2010)

Doz and Kosonen (2010) argue that strategic agility can help the change of business model. Three core meta-capabilities, which are strategic sensitivity, leadership unity and resource fluidity can be created to increase the strategic agility. The strategic sensitivity means “the sharpness of perception of, and the intensity of awareness and attention to, strategic developments”. Leadership unity means “the ability of the top team to make bold, fast decisions, without being bogged down in top-level ‘win-lose’ politics”, and resource fluidity means “the internal capability to reconfigure capabilities and redeploy resources rapidly”. Business model renewal is one of the main outcomes of great strategic agility. Strategic sensitivity increases the ability to detect new business opportunities and recognize the right time for it. Business model renewal also involves quick decisions made with intuition, which is enhanced by the leadership unity. In addition, doing experimentation on a new business model requires quick changes in resource allocation.

## **2.5 Questions to help reaching the objective**

Because the ‘Business model renewal process’ has not been studied much, the task in this thesis is to create a new framework of the process conducted in collaboration of external experts and company key people. The cases studied in this research concentrated on the early designing phase of the business model development

process. Both of the cases studied in this thesis developed new business models for new services rather than products, which narrows down the scope of the research even more. Both of the companies were small to medium sized enterprises, in which the business model renewal might be easier to conduct than in large corporations, because smaller companies are typically more agile. Furthermore, the top managers of the companies were involved in the cases meaning they have enough power in the company to conduct the business model renewal process. Conducting the renewal process might be much more challenging in a large company where a certain unit is trying to push a new idea to the top managers. In addition, the studied business model renewal processes included workshops, because the geographical reasons made it possible to have real-life meetings. The business model could also have been developed with several other methods, like using virtual conferences or other new technologies, but the scope of this study is the business model renewal process using workshops. The reasons why the workshops are used in the new framework are the benefits of meeting in real life for creative working.

Taking into account the boundaries discussed above, the following questions help reaching the objectives:

1. What are the key steps in a collaborative business model renewal process?
2. What are the critical success factors in the business model renewal process?
3. What are the resources needed in the business model renewal process?

The first question helps identifying the different phases in the business model renewal process. The second and the third question help the user of the business model renewal process to identify what one should do and what to avoid, and what does one need in order to get to the final outcome. The resources here are limited to the amount of people and time.

## **3 Study background and research methodology**

### **3.1 Case background**

In the ‘InnoBusiness’ and ‘ArvoBusiness’ projects a few companies received different kinds of development work from several research centers and universities in Finland. For this thesis two of the several case companies are studied. The companies are called Company 1 and Company 2 because the companies want to stay anonymous.

The aim of the two studied cases was to renew business models for the case companies. Organizing workshops was the main working method in both of the cases. The external experts acted as both practitioners and researchers during the studied cases. Most of the time, they developed the business model, gave guidance to the managers, and provided the structures for the workshops. They also prepared and held the initial interviews for the companies. In addition, they conducted research activities and published academic articles.

Company 1 has expertise in development and contract manufacturing of advanced devices or instruments for professional use. The demand for the services offered by Company 1 is related to the market situation of the manufacturing companies in Finland. Before the ‘ArvoBusiness’ and ‘InnoBusiness’ projects started, global downturn had caused poor demand, and the competition in the market was quite fragmented. The main competitors of Company 1 were the own development departments of the customers, smaller engineering offices, and larger international electronics subcontractors. According to estimates, there were still about 150 companies providing electronics solutions in Finland, even though a lot of the production has moved away from Finland to the low cost countries. The essential planning service technologies are integrated analog and digital electronics planning, user interface design, and PC programming. The essential technologies for production were small scale serial production and device configuration of through-hole and surface mount technology-produced products. The company had recognized a need to find a business model that allows creating better profits. The current subcontractor concept was not working well enough. The objectives of the collaboration with Company 1 were

- To get an innovative perspective of new, profitable growth enabling business opportunities
- To create an analysis about the lack of knowledge and skills between the current business model and the recognized new business opportunities
- To improve the possibility to make a decision about the new strategy of the firm

The businesses of Company 1 in the beginning of the project are summarized in Figure 7.



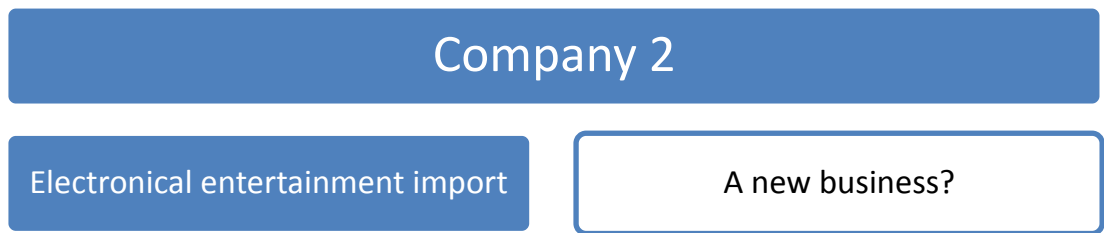
**Figure 7 the businesses of Company 1**

Product development service contains pre-investigation, mapping and specifications, which are used to develop a new product. Mechanical design is outsourced from a partner. Product development of small devices for professional use is the core business of Company 1. New product introduction includes designing of production systems and production testers. Manufacturing services includes assembling different electrical and mechanical parts into the desired devices. Maintenance includes service, managing change and upgrading.

Company 2 is a traditional importer of consumer electronics and wholesale company targeting international business exploiting a subcontractor network. Before the ‘InnoBusiness’ and ‘ArvoBusiness’ projects, the markets of electronic entertainment products in Scandinavia were controlled mainly by few global brands, that were competing with basic products, large volumes and low prices. Technology is developing in the electronic industry at high pace and the consumers were often confused with the product specifications when they were deciding whether to buy or not the product. The company had recognized a new business opportunity by creating a strong Scandinavian brand, product portfolio and marketing concept. The targets of the collaboration with Company 2 were

- To create even stronger Scandinavian brand
- To create a marketing concept for the brand
- To create a portfolio and conceptualize supporting services
- To develop a new business model and process that support the brand and portfolio

The businesses of Company 2 in the beginning of the project are summarized in Figure 8.



**Figure 8 The businesses of Company 2**

Even though the objectives in the beginning of the cases were much broader than just a basic business model, the main concentration area was the business model. The end products of the cases were also business models, and the other targets got much less attention.

### **3.2 Research methods**

The main approach used to get to the objectives of this study was to explore the business model renewal processes done for these two case companies. A case study is one way of constructing social science research and it is particularly a good option, when the researcher does not have much control of the events and it is about a phenomenon occurring during the same time as some real life context. (Yin, 2003)

In this study, the ‘grounded theory’ method was applied to gather and analyze the data. Grounded theory was introduced in 1967 and the procedures of it are “designed to develop a well integrated set of concepts that provide a thorough theoretical explanation of social phenomena under study”. The data collection in grounded theory involves interviews and other sources like documents, books and reports. Certain procedures belong to the grounded theory. For example, data collection and analysis are interrelated processes, because this allows the researcher to grasp as many of the relevant aspects as possible. In addition, created concepts are the basic

units of analysis, not the raw data. If an interviewee says something interesting related to the studied phenomenon, it is labeled to a certain name. When something resembling the same phenomenon appears from other interviews, they are labeled under the same name and a concept is formed. Moreover, new categories must be developed, which means that concepts that are related to the same phenomenon are put in the same category. Therefore, categories are on a higher level than concepts and compared by a similar comparison method as the lower level concepts. The analysis process should include constant comparisons and patterns and variations should be explained. In addition, keeping memos around the theories help on keeping track during a research project. According to the grounded theory, the study should not be conducted alone, which means that the inputs from colleagues and similar are welcome. (Corbin & Strauss, 1990)

### **3.3 Data collection**

Sometimes interviews are done to test a hypothesis that has been created before using very formal sets of questions, or trying to understand the subject better and possibly even generate hypotheses from the results (DiCicco-Bloom & Crabtree, 2006). In this thesis, the second method is being used, which has similar elements as the grounded theory (Corbin & Strauss, 1990). The main idea of the interviews was to understand how the business models were renewed in the studied cases and the objectives of this study were defined during the process.

To analyze the new business model development process done in the ‘InnoBusiness’ and ‘ArvoBusiness’ projects, nine semi-structured interviews altogether were conducted and one session with multiple participants. Out of the research consortium, the interviews were held to two external experts from VTT Technical Research Center of Finland, one from Turku School of Economics, and one from Aalto University, because these external experts were responsible for the two particular cases. In addition, one person from both companies was interviewed. An extra mini workshop was held for two representatives from Company 1, and one external expert from VTT, Turku School of Economics and Aalto University each.

The initial objective of this thesis was to develop a new business model renewal process that was organized by external experts. During the first interview round both



the external experts and the company representatives were interviewed. The questions were asked to understand how the business model renewal process done by the external experts happened and the objective was defined and focused according to this information. The first round interview asked questions about the overall progress of the case, but also what was good and what went wrong. The interviewees were asked to draw a process map of the business model renewal process what they had been working on. This process map was done by every interviewee. The task was very open: the interviewee was told to draw the process map how he or she remembered it. The interviewee could add any details what was important in his or her opinion. In addition to the process map, the benefits and challenges of working in a multidisciplinary collaboration between external experts and company key people in the development of the business model renewal process were asked. The first round interviews concentrated heavily on the case Company 1, because it followed the initial plans better than the case Company 2.

The second round of interviews was conducted to get a deeper understanding of both of the cases, and the targets were some of the external experts. The interviewees were asked to compare the two cases. More precisely, they were asked, what went similarly or differently. In the second round the interviewees were asked the opinions of the external experts about the importance of experimentation, change management and collaborative working. These were considered important in the literature for the business model renewal process. The interviewees were also asked how one could increase these concepts in the process, if the cases were done again.

After the interview rounds, the first version of the framework of the new business model renewal process, designed as an initial result of the study, was presented to attendees in a mini workshop with two Company 1 representatives and three external experts. The first version was based on the results of the interviews conducted earlier and comparison of them to the literature. The mini workshop started with the presentation of the first version of the framework in detail. Then, the attendees in the meeting were given a copy of the framework and were asked to draw changes, comments, and errors on it. After everyone had made their comments and change suggestions, the attendees shared their views in front of the others. Each of the

comments was discussed. The discussion of the views was informal in nature, and all the key points were written on a memo of the event.

In addition to the interviews, another main data source was the data set provided by the instructor of this thesis. The data set covered most of the presentations, reports, memos and sketches done by the external experts during the 'ArvoBusiness' and 'InnoBusiness' projects ranging back to the very beginning of the projects. The data set covered many events from the case Company 1 and a few events from the case Company 2.

### **3.4 Data analysis**

After the interviews in the first round, the process maps drawn by the interviewees were compared with each other. All the same steps that were drawn in different pictures were identified and their relation to the other steps was analyzed. The process maps were quite similar and there were not many inconsistencies. However, some of the interviewees concentrated on slightly different parts of the process and highlighted different parts. From this analysis the process map of the case Company 1 was created.

In addition, in the first round the answers for the questions regarding the success and failures of the process and the collaboration were put in following columns: enhancing and hindering factors of the whole process, and enhancing and hindering factors of the collaboration. Then, similar themes in the same column were identified and conceptualized. There were many recurrent themes in the interviews. The enhancing and hindering factors considered both cases, but leaned a bit to the case Company 1. Some of the concepts found were related to each other, which formed different categories.

The results of the second round interview were used to get a better understanding of the case Company 2. The case did not have much information in the data set provided for this study. In the interviews the interviewees were asked whether each step of case Company 1 happened in the case Company 2 and if there were any additional phases. This way, the progress of case Company 2 was identified and the differences between the cases analyzed. The same part also worked as 'proof check' of the correction of the case Company 1. The interviewees were not only asked to tell

what happened with the case Company 2, but they were also asked to compare the two cases: What could the case Company 1 learn from the case Company 2 and vice versa? How would they have done the cases differently if they could have? These questions made it possible to include the interviewees in the analysis process.

The answers for the questions related to the importance of the arisen themes in the literature were compared to each other and they were included in the designing process of the final results. Many of the themes mentioned in the literature like experimentation were used in the studied cases. There were still some other interesting concepts that were not used in the cases. These additional themes were analyzed whether they should be included in the final framework or not.

Both of the interview rounds and the analysis of them resulted in an early business model renewal process framework. In the final mini workshop with multiple participants the attendees were involved in the analysis process, as their opinions and suggestions on advancing the first version of the new business model renewal framework were used. After this the final framework of the business model renewal process was created.

After the framework was created and every major step identified, the framework was used to place the key success factors, acquired from the interviews, for each step. The key success factors were analyzed from the enhancing and hindering factors and they were divided into different parts of the process according to the type and the urgency. Also, the required people and time were estimated for each key step according to the number of attendants and the scheduling of different workshops in the cases, and the responses in the interviews.

## 4 The progress of the studied business model renewal processes

### 4.1 The main phases

The business model renewal processes for both of the case companies took place between the May 1<sup>st</sup> 2010 and the September 30<sup>th</sup> 2012. The interviews together with the data set received from the external experts resulted in the process map described in Figure 9. The figure illustrates the main phases of the two studied cases.

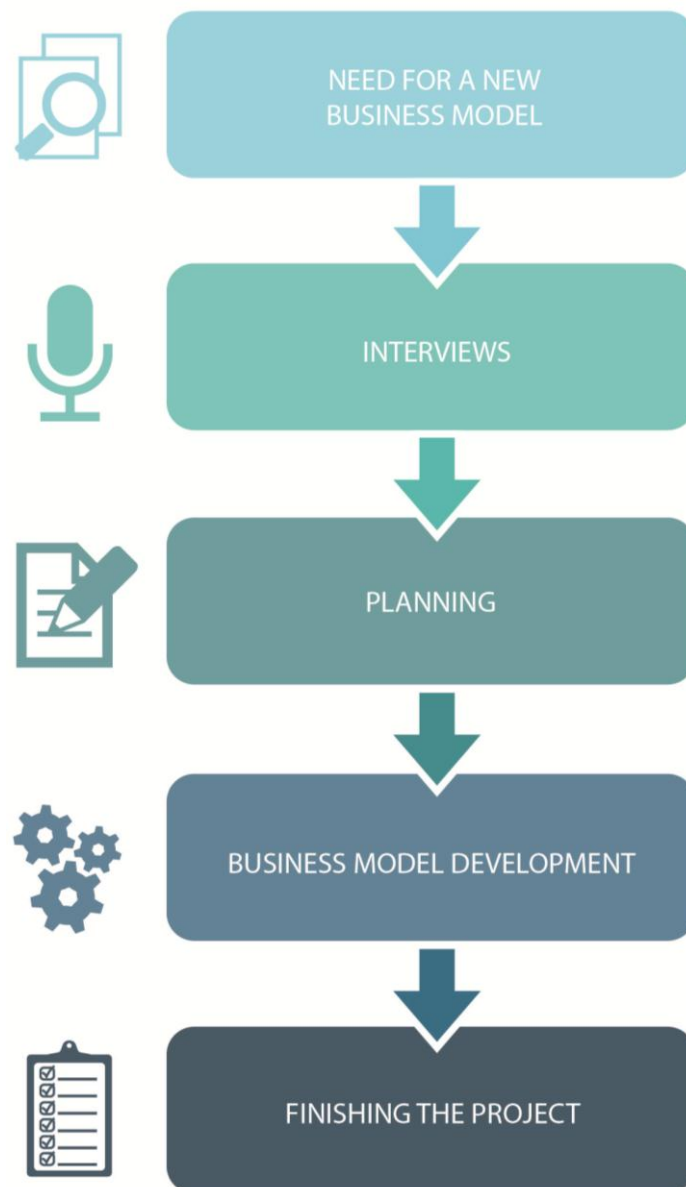


Figure 9 Business model development process of the studied cases

## **4.2 Case progress – Company 1**

### **4.2.1 A need for a new business model**

Typically, when a company is facing external pressures, a need to change the current way of working emerges and companies will have to look for new business opportunities (Chesbrough, 2007b). This also leads to a need for a new business model. Company 1 was dealing with external pressures in the beginning that pushed them to take part in the process. One of the external experts said:

*“The starting situation was that revenue had decreased and they had laid off employees.”*

This means that there needed to be some changes to the status quo in order to survive the external pressures. Because of all this, the company was a viable candidate for the research project, and as such they chose to participate.

### **4.2.2 Interviews**

The process was continued when the external experts interviewed all the companies involved in the project. The interviews were completed by two experts from VTT. The purpose of the interviews was to get initial understanding of the basics of the companies. The interviews resulted in more knowledge about the current market situation, the current company situation, the business environment of the company, technological development, opportunities, goals, methods for competition, resources, capabilities and performance. These results were then analyzed by the experts, and used as the basis of the following workshops.

The interviewers were from only one research unit, and did not involve everyone. Involving everyone in all the cases and in every interview would have been extremely time-consuming, even though it may have increased communication.

### **4.2.3 Planning**

#### **4.2.3.1 Workshop A1**

Workshop A1 was based on the initial interviews held earlier and concentrated on the current state of the business model. The workshop was organized for two Company 1 representatives by three external experts from Turku School of Economics, two

external experts from VTT, three external experts from Aalto Design Factory and two external experts from MIND-research group.

In Workshop A1, the external experts received information about the history of the company and the current state of the company. Both of these topics contained information about the services, customers, markets, resources, knowledge and skills, networks, competitive situation, and internationalization of the Company 1.

In this workshop, there were already more attendees compared to the initial interviews, which made the communication more efficient and everyone got to know each other better. The time between the initial interviews and Workshop A1 was a bit over two months, which seems understandable given the large size of the whole research consortium.

#### **4.2.3.2 Workshop A2**

In Workshop A2 there were two participants from Company 1, two from VTT, three from Turku School of Economics, one from Aalto Design Factory, and one from MIND. The workshop was based on the company interviews, Workshop A1, and early business model drafts prepared by the external experts. In the workshop there was a presentation and discussion of alternative future scenarios, which were based on a dream visioning method. With this method different future scenarios were compared and ranked with a decision matrix. The outcomes of Workshop A2 were preliminary plans for the renewal of the business model. After the workshop, managers went through all the business model drafts and analyzed them in their own time.

Workshop A2 happened quite soon after Workshop A1, which was natural as the themes of the workshops were similar: trying to find information about the past, the current state and the future of Company 1. The same attendees were also present in Workshop A2 as there were in Workshop A1, which was good for the continuum of the process.

#### **4.2.3.3 Workshop B**

The business model draft to be developed was decided in Workshop B. The idea of the Workshop B was to define and select the main business model elements for

further development. In addition, the end product of the process was determined. The workshop produced material for the customer interviews and created the structure for the rest of the process.

The workshop also happened quite quickly after the previous workshop. The managers were given enough time to decide the pursued draft, but not so much as to lose the focus and drive obtained from the previous workshops.

#### **4.2.3.4 Customer interviews**

After the workshops, two potential customers for the new business model were interviewed. Customer 1 was a familiar company to Company 1, and they were asked questions about the product, need and opportunities. The customer interview was done by one external expert from VTT and one from Turku School of Economics for two customer representatives. Customer 1 decided to keep working together with Company 1 for the rest of the process on the new business idea.

There was a longer break between Workshop B and the first customer interview. External experts needed time to find, contact and organize a meeting with a potential customer. The customer interviews were also done with a smaller group of external experts because it was easier to organize that way.

Customer 2 was also interviewed, but it did not result in a partnership. The interview was held for one Customer 2 representative by the same external experts as the interview with Customer 1. In the customer interview, questions were asked about products, resources, markets, competitiveness, customers, partners, networks, and their history with Company 1.

The interview happened rather quickly after the first interview, if one takes into account the vacation period in Finland during the summer. With the experience from the first interview it was natural to have the next quickly afterwards. The same people also did the interview, which also make sense, as they already knew the relevant questions.

## **4.2.4 Business model development**

### **4.2.4.1 Workshops**

Different workshops were organized to develop the business model. Between the workshops, the external experts prepared the next workshop, and designed and adjusted the business model. There were not any plans about the themes of the workshops in the beginning of the development phase. The theme for a next workshop was decided at the end of every workshop according to the new emerged needs. Altogether six workshops were held. They were called ‘Technology knowledge and skills’, ‘Business model canvas’, ‘Competitive advantage and differentiation’, ‘Customer cases’, ‘Customer criteria and service process’, and ‘Customer portfolio’.

### **4.2.4.2 Technology knowledge and skills**

The first business model development workshop was held for several representatives from Company 1 by two external experts. The workshop was to address the competencies, especially technology-related competencies, of Company 1. The external experts had prepared a questionnaire for all the R&D workers in the company. The questionnaire asked questions about the skills of the workers. The different skills and knowledge were categorized as disabling technologies, enabling technologies, other technologies and other challenges. Then, a technology map was built according to the categories which helped to identify the needed competencies for the new business model. The company needed to put effort on the identified competencies in order to make the new business model fully functional. The development plans for these competencies were one of the outcomes of the workshop. In addition, the managers gained clearer views about their existing competencies.

### **4.2.4.3 Business model canvas**

The workshop was held for two company representatives by four external experts. It was used to better visualize the current business model in development. As the name of the workshop suggests, the Business Model Canvas by Osterwalder and Pigneur (2010) was used in the workshop with slight modifications. A ‘selection’ block was added to the canvas framework in order to give better view about the new service. The outcome was a clearer business model draft, which included comments and



observations from external experts, and the changed working title of the business model.

#### **4.2.4.4 *Competitive advantage and differentiation***

The ‘Competitive advantage’ workshop was held for two company representatives by four external experts. The workshop was, again, organized rather quickly after the last workshop and included most of the external experts in this process. In the workshop the managers practiced pitching the new business model, which aimed at recognizing the essential parts of the value proposition. The pitches were videotaped, discussed and revised. The content of the workshop came from an expert and it resulted in a more prominent customer value perspective.

#### **4.2.4.5 *Customer cases***

This workshop held for two company representatives by four external experts. In the workshop the experiences of customer cases were discussed. There had been in total of two or three potential customers, which means there were new partnerships after the initial customer interviews as well. The discussion of customer cases did not only happen during this workshop. The same topic was discussed briefly in almost every workshop, but this workshop concentrated on this subject. After this workshop everyone had more knowledge about the validity of the business models and also they knew what the next steps regarding those customer cases were.

#### **4.2.4.6 *Customer criteria and service process***

This workshop was held by four experts. The purpose of this workshop was to create a tool that helps identifying the correct customers and the service process. The customer criteria uses following viewpoints to analyze the customer type: the value of the idea, the characteristics of the customer, the viewpoint of the case Company 1, and business viewpoint. These viewpoints lead to a conclusion, whether to push R&D, network control, ownership, or not include the customer in the portfolio. The final outcome of the service process had five steps: 1) contact, 2) project plan and rules, 3) contracts, documents and financing, 4) production and company forming, and finally 5) exit and contract manufacturing.

#### **4.2.4.7 Customer portfolio**

The workshop was held only six days after the previous workshop, which indicates fast progress. The attendees were the same group of people. The purpose of this workshop was to create a portfolio of different customers. The portfolio identifies the customers, the risk levels associated with different customers, the time needed for production and how much effort is needed if working with a certain customer. The outcome of the workshop was a complex matrix that was tested with some potential customers. The tool helps to manage the customer base and helps to identify which of the potential customers are more valuable than the others.

#### **4.2.5 Finishing the process**

The last part of the whole process consisted of a few meetings. In the final meetings the business model was summarized and fine-tuned. During the meeting the whole process, collaboration experience, objectives and how they were met was recapped. After the final meeting the companies got the new business models operating in full scale and the external experts published research papers on the subject.

Additional meetings were held a few times where the external experts asked how the new business models had worked out. By the time of the official ending of the process, Company 1 had introduced two new start-ups, and is part owner of one of them. A third idea was dropped from the customer portfolio, but the two examples suggest the model has already taken the first promising steps.

### **4.3 Case progress – Company 2**

#### **4.3.1 A need for a new business model**

The Company 2 also experienced external pressures, such as increasing competition and decreased profitability, which forced them to find new solutions for the current way of working. This caused a need for a new business model. These reasons drove Company 2 to take part in the project. The company had operated in a relatively same way for a few decades, which also was an indication that change was needed. They had recognized a possible new business opportunity already before the business model renewal process, which set the mindset of the managers perhaps a bit less open. The initial part of the process occurred basically in the same way as with Company 1, except for the extra initial idea.

### **4.3.2 Interviews**

Company 2 had interviews done by external experts as well, and it followed a similar pattern as in the first process. The initial interviews were the same for all the case companies in the whole research consortium, and the inputs and outputs were the same: the external experts asked questions about the current market situation, current company situation, the business environment of the company, technological development, opportunities, goals, methods for competition, resources, capabilities and performance. The interviews gave the external experts more basic information about Company 2, which was used in designing the following workshops.

### **4.3.3 Planning**

#### **4.3.3.1 Workshop A1**

Workshop A1 concentrated on the company history and the current aspects, which provided data for the external experts. The external experts asked questions about the key elements of the business of Company 2 and deepened the knowledge acquired from the initial interviews. After Workshop A1, the external experts had more data about the services, customers, markets, resources, knowledge, skills, networks, competitive situation, and internationalization of Company 2.

#### **4.3.3.2 Workshop A2**

Workshop A2 was based on the previous workshop and the initial interview. Before the workshop, the external experts used the data acquired from these events to design a few initial business model drafts. These drafts were analyzed and developed further in the workshop. In addition, the future scenarios using each of the initial business model drafts were predicted. After the workshop the updated drafts were given to the managers of Company 2, so that they could spend time on exploring each of them.

#### **4.3.3.3 Workshop B**

Before the Workshop B the managers of Company 2 were thinking about the different initial business model drafts and choosing the best option. The decision about the developed business model was supposed to be made in the Workshop B, but it did not happen because of a few reasons. The initial business model drafts were perhaps not at the level that they hoped them to be. In addition, Company 2 was maybe a bit

hesitant to make decisions about it. The outcome of the workshop was still the same business model drafts and not any concrete decisions were made.

Moreover, the budget was not initially agreed by Company 2 after Workshop B. The budget ended up being lower than initially planned, which caused the process to delay even more. Because of the lower budget, there were fewer workshops in the ‘Business model development’ phase than, for example, in the case Company 1.

The pilot customer interviews did not occur during the ‘Planning’ phase. Because the business model draft to be developed was not selected, it was hard to identify potential customers. In addition, their earlier business was business-to-consumer in nature, meaning they could not interview any existing large customers. The possible interviews at this point would have required more efforts from the external experts and the managers.

#### **4.3.4 Business model development**

##### **4.3.4.1 Workshops**

Despite the challenges in the ‘Planning’ phase, the outcome of the process was a promising new business model and at the time of writing this master’s thesis is showing preliminary results. During the development phase there were successful cases after active experimentation, which was encouraged by the external experts. There were four workshops in the ‘Business model development’ phase in the case Company 2, which made the success happen. They were called ‘Dream visioning’, ‘Business model canvas’, ‘Fast experiments’ and ‘Interview’.

##### **4.3.4.2 Dream visioning**

The ‘dream visioning’ workshop was organized by three external experts for the two company representatives and the sales people of the company. A dream visioning method was used to help the representatives of Company 2 to have understanding about what the new business model could be in the future. By this point, the draft was not yet chosen, and the dream visioning method was used to decide the to-be-developed concept. The minor challenges the process had earlier were overcome in this workshop and the rest of the process finished much smoother.

#### **4.3.4.3 Business model canvas**

The workshop used the same business model canvas framework by Osterwalder and Pigneur (2010) as was used with Company 1. With the framework, the business model became more visualized and it wrapped up the business model neatly in a more understandable way. In the framework another block was added, which was called 'selection' to give more information about the actual service offering. After the workshop managers and the external experts had clearer view of the business model.

#### **4.3.4.4 Fast experiments workshop**

The workshop was held for the two company representatives by four external experts. Here the managers of the Company 2 practiced how they could test their business model concept and the new business idea. The sales people of the company had not been successful with selling the new service to the potential customers before this workshop. Because of this, the workshop was used to develop the pitching of the new business, which led to better understanding of the value proposition of the new business model. Another outcome of the workshop was an enhanced customer contacting process. The managers were given homework of trying to get new customers with the new plans. The efforts paid off as they got a major customer for their new business before the end of the process.

#### **4.3.4.5 Interview workshop**

Because of the decision about the developed draft was delayed, the pilot customer interviews could not be done in the 'Planning' phase. However, during the 'Business model development' phase the pilot customers were identified and many of them were contacted. In the 'Interview' workshop the initial results of the case customer interviews were presented, discussed and analyzed. In this workshop they discussed about the first major customer they were able to get, and how it happened. This workshop also worked as an ending workshop of the business model development phase, and the final outcome of the phase was a new tested business model.

#### **4.3.5 Finishing the process**

After the business model development phase an extra meeting was held where the experts and the company representatives shared information about the progress of the

implementation of the new business model. After the meeting Company 2 continued to work on the new business model and further develop it.

## **5 Results**

### **5.1 Learning from the two cases**

The main phases of both of the cases followed the same pattern; ‘A need for a new business model’, ‘Interviews’, ‘Planning’, ‘Business model development’ and ‘Finishing the process’. This seemed to work well in both cases. The main phases of both cases work as the basis of the proposed framework of the business model renewal process with slight changes in terminology and scope of each phase. However, at the lower level the cases were somewhat different, because of different kind of business, people and the budget.

Both of the cases produced a promising business model. The actual results will not be visible for a few years, but both of them already managed to get initial customers. It is impossible to predict the actual results and know whether the model provides significant growth in sales and profits for the companies, but the initial reaction of the managers suggest that they have the right attitude to pursue those targets.

Company 1 is operating in a business-to-business environment and Company 2 in a more business-to-consumer environment before the business model renewal process. Because of this the approach for the business model development is quite different in these two cases. Customer segments and customer relationship management are much different in nature in these two environments. However, after the process Company 2 entered into the business-to-business markets, as they started selling big LED screens to different companies and event organizers among others. As both of the cases ended up being at least initially successful and followed the same main phases, it suggests that similar approach may be used for both business-to-consumer and business-to-business environments. In addition, the outcome of a similar process can be at least a new business model in a business-to-business environment.

Change resistance occurred in both of the cases, and perhaps a bit more in the case Company 2 than in the case Company 1. This was one of the reasons why the case Company 2 got delayed. In the end, though, all the key people had changed their mindset and admitted that changing the mindset is not a quick process. They also understood it was inevitable in order to change.

Both of the companies joined to the development process after they had experienced external pressures such as lowered demand and profitability. This led to a need for change and a new business model, which led both of the companies to take part in the project. The cases could have also been done even if there were not an external pressure to change, but perhaps it would have required much more from the managers to be willing to change and look for new directions.

Both of the companies were interviewed in the next phase to get a better understanding of the history and the current state of both companies. Even though the external experts aimed to get even more information about the companies from the interviews, the results were still considered as a good starting point for the process. Some of the experts would have included more experts in the initial interviews to maximize the communication from the early on. To do this, there should be fewer cases occurring simultaneously in the research consortium, because every external expert doing all the interviews in all cases may bring some challenges in scheduling.

The planning phase had more differences than earlier phases caused by variety of reasons. The early parts of the phase were similar, but customer interviews were not done during the planning phase for Company 2 because they had not identified the final customer yet. Workshops A1 and A2 worked quite similarly, but the results of Workshop A2 for Company 2 were not good enough, which caused the dysfunction of Workshop B. Overall the topics of all the workshops were considered to be good and they provided the necessary information needed in the planning of the business model renewing.

The development phases were quite different in the two cases, because the companies are different and had different budgets. The workshops used in each of the cases were designed according to the needs of the case companies. In addition, they were chosen after each workshop according to the emerged needs from the previous workshops. Choosing the workshops individually for each process was a rather good approach, because it does not make sense to use, for example, 'Technology skills and knowledge' workshop for a company that does not have or need any skills related to different technologies. There probably is not a workshop



combination that every company needs to go through in a business model renewal process. However, to choose the workshops “on the flow”, rather than having carefully designed plans, can have arguments to support it or to oppose it. A new need can arise in a certain workshop, and, therefore, a need for some different workshop, which would have been impossible predict in the beginning. On the other hand, it may be clearer for everyone involved in the process if everyone would know what would happen in the future. Perhaps the workshops used in the development phase should be designed for each case company beforehand, but also leave room for possible changes. In this phase the same approach as suggested in the literature on the business model renewal processes should be used: have some plans initially, but change the plans according to the experiments. Each new workshop is an experiment in the business model renewal process, and the feedback from the workshop should tell whether to do the initially planned workshop next or some else.

Finally, the cases were ended in a similar manner. In the final meetings the experts and the managers discussed about the progress of the companies and gave further suggestions. It seems beneficial that the experts keep distance from the company for a while and let the company work on the new business model on their own. The monitoring phase could continue even further in time, but the cases had to be ended because of the ending of the research consortium.

The lessons learned from the studied two cases are concluded in the Table 3.

**Table 3 Lessons from the studied two cases**

<b>The case Company 1</b>	<b>Both</b>	<b>The case Company 2</b>
Being open to change speeds up the renewal process	First level process works	Getting pilot customers extremely important
For a company operating in business-to-business environment it may be easier to find pilot customers	External pressure drives change	Such process can be applied to companies operating in business-to-consumer environment
	Initial interviews worked well	Creating of the business model sketches important
	The themes in the planning phase worked well	
	No need to organize the same workshops for every company	
	A new model can be created with similar process	
	Ending phase worked well	

## 5.2 Comparison to the literature

The analysis of the interviews and the data provides a new approach for a business model renewal framework that utilizes external experts. The framework applies many of the themes found in the literature and wraps them up together into one business model renewal framework. The literature usually just tells what aspects and themes are important for the business model renewal but only a few provide step-by-step approach. The interview results offer a possibility to develop such a step-by-step framework.

The whole process started in both cases because of an external pressure, which is consistent with the literature (Chesbrough, 2007b). In addition, both of the cases were similar as the first two stages of the Sosna et al. (2010) process map, which were ‘the initial business model design and test’ stage, and ‘business model development’ stage (Figure 5). Differences to Sosna et al. (2010) were the outside experts providing guidance and fresh views to managers, which speeded up the development process.

Another difference was that the testing and learning in the business model

development happened with the help agreed pilot customers, rather than testing in general. The cases studied in this research offer a business model renewal framework from a slightly different point of view and goes deeper into detail.

The model by Mullins and Komisar (2009) was more different than used in the studied cases. While they also highlighted the role of experimentation, they provide a method of thinking about the new business model by finding analogs, ‘antilogos’ and ‘leaps of faith’ in the business environment and in the business model before conducting the experimentation. This method was not used in the studied business model renewal processes, but it could be applied in an individual workshop. In the ‘Planning’ phase Workshop A2 and Workshop B could have used this method to design the early business model drafts. This is, however, an indication that these frameworks are not the whole truth and different methods can be applied.

The experimentation, that several authors felt important, was also used during both of the cases. There were thought experimentation, experimentation with schematic models and also real life experimentation conducted by managers, which cover all the types of experimentation. The thought experimentation was done in the workshops and the ‘dream visioning’ method is a good example of it. The model experimentation was done with the ‘business model canvas’ tool and the real-life experimentation was done by managers between the workshops. The experimentation in both cases was done properly, as the way of working and the business model were adjusted after the feedback of the experimentation. They also learned from failures. The experimentation used discovery-driven planning because there were no initial plans before the cases.

Effectuation, which is related to the discovery-driven planning, was also used in the business model renewal process. For example, the experts designed many of the workshops without initial plans because they did not have enough data to plan too far in the future. They decided to have the next workshop on the basis of the limited knowledge of the company and the new business model to gain more data. This is why discovery-driven planning was more used than analytical approach.

The external experts designed the development process based on the experiences of the experts and the needs of the company. The multidisciplinary expert-manager

collaboration is an example of a collaborative way of working highlighted in the literature. The external experts provide cost savings for the company by reducing the time needed in the development process. Both of the companies are small to medium sized enterprises and do not have as many resources as large companies. Thus, utilizing networks is extremely important for them. They also provided more knowledge from different fields than the knowledge of the managers.

The change resistance happened in both of the companies in all levels, and it was one of the reasons why the cases got delayed. This is something that the external experts should have more attention if a similar business model renewal process is being done again in the future. On the other hand, most of the interviewees did not think it was a bad thing that the process was delayed, because they had recognized that changing the mindset and conducting experimentation requires time. Still, the delay should have been much shorter, which was something most of the interviewees agreed.

In both of these cases the new model did not hurt the existing model. In fact, the business model for the case Company 1 was actually beneficial for the old businesses, as the customers of the new business model can end up as the customers of the old business model. The new model added another service right at the beginning of this lifecycle, and thus helps finding new customers earlier than before. The new model of Company 2 broadened the business to totally new customer segments. Also, according to the representative of Company 2 the new business did not hurt the existing businesses.

## 5.3 Success factors and key aspects

### 5.3.1 Summary of the interviews

The outcomes of the studied cases were not just papers of a new business model, but they were tested models including some extra tools helping with the new business model. Both cases managed to create business models that already had pilot customers. Success factors of the studied two cases are collected from the results of the interviews. In addition, the aspects or parts of the process that were important or could have done differently to get even better results are identified. These success factors and key aspects are used to design the new framework of the business model renewal process.

Several similar themes and opinions came up from the interviews conducted for this study. The themes and the opinions are listed in Table 4.

**Table 4 Enhancing and hindering factors, opportunities and challenges of the cases**

+ + and - -		
Wide knowledge base	Communication	Not clear roles and path in the beginning
Number of workshops	Delayed process	No collaboration with other companies
Trust	Mindset	Customer interviews too late in the case Company 2
Chemistry		
New personal contacts		
The external experts worked together		
The amount of external experts		

### 5.3.2 Multidisciplinary research collaboration

#### 5.3.2.1 Wide knowledge base

It seems that the multidisciplinary expert consortium brings benefits to the business model renewal process. By having people working on the new business model with different backgrounds, the new model can be broader and more thorough. The multidisciplinary expert team offers wider knowledge base than the regular managers of a company, and, thus, is more likely able to create a better business model. This was supported by the literature (see for example Arias (1995); Gumusluoglu and Ilsev (2009); Park, et al. (2008)), and was also stated in many interviews, for example:

*“There was definitely broader knowledge base in this research collaboration, if compared to only one research unit. And if one would look to the initial allocation of research units to different building blocks (of the process), our research unit would not have had enough knowledge on them.”*

*“... if only [our research unit] had done all the development works, the outcome would have been very different. The customer perspective would have been thought out a lot worse. The other units brought clearly complementary knowledge to the process.”*

and

*“The chances (for success) increase, meaning one plus one equals three. Every research unit is expert on their own field, and has different contacts and knowledge.”*

This seems to make sense since the process covered different parts of the business model very broadly, and business model itself consists of areas where different type of knowledge is needed. For example, when key activities block of the business model requires some technical skills, someone who has knowledge of the technology provides far more reliable ideas than someone who has no knowledge on it. The best outcome of the business model renewal process is more likely to be achieved, if external experts with different backgrounds are used.

### **5.3.2.2 The number of external experts**

Most of the participants from both of the studied cases felt that the amount of experts was just right: bigger would have made the workshops harder to organize and smaller would have sacrificed the wide knowledge base. For example this comment supports the amount of experts in different cases:

*“If there would have been more than four experts in the workshops, it would have probably become too difficult.”*

However, the representative of Company 2 said:

*“In the research consortium [comprising all the cases in the ‘ArvoBusiness’ and ‘InnoBusiness’ projects] there were some research units that were not important for us. When we were visiting [a unit], sometimes it felt like do we really need to be here.”*

It was not a big flaw in the case because it was only a small part of it, and it was more of an administrative issue rather than the actual business model renewal process. However, some consideration should be put on the each case individually and think what kind of knowledge each of the new case needs. Some companies may not need as deep an understanding of technology as others.

Four external experts were used in both studied cases. The new business model renewal framework should also include this amount of experts, because the size of the team was considered good among the interviewees.

### **5.3.2.3 Roles and leadership**

Initially the roles of different experts were not very clear. However, when the cases went along, the roles became clearer and started functioning better. Yet, the roles were still not considered to be as clear as they could have been. The interviewees mentioned that they did not always know who was responsible for a certain event and did not know clearly what happens next, even though for every workshop one person was named responsible. Many of the interviewees would have put more effort in the beginning. The lack of clarity of the roles suggests that there was not enough leadership. Quotes such as

*“The beginning of the process could have been managed better. We did not even really know who leads the process and who takes the responsibility.”*

and

*“We had a big group of people and it becomes easily confusing if no one has the main responsibility.”*

are examples of the lack of clear roles and lack of leadership. This could have been avoided by naming the leaders of the individual cases, which would resolve both the leadership issues and clarify the roles of different experts, provided that the leader is competent. The discovery-driven planning where initial plans are almost nonexistent can create confusion in a working process. Some experts were replaced with others during the process, which also lead to lack of clearness of the roles.

The new business model renewal framework should highlight the importance of the beginning of the process. The leadership needs to be good right from the start to avoid confusion along the way. The roles should be determined from the start too, but they should also have some room for changes along the way, as the process may experience changes along the way, as the discovery-driven planning method is being used.

#### **5.3.2.4 Chemistry and trust**

Many interviewees said that the chemistry was good and it was “fun” to work with the other experts. Some of them noted that if there had been one too dominant person, the outcome would likely not have been as good as it was. The following two quotes support these statements:

*“The experts were not too different and we understood each other well.*

and

*“Perhaps it would have been more challenging if there were more dominant persons.”*

However, the situation appeared to be different in the beginning of the process. This seems to be natural, because people did not know each other beforehand and had not



done similar research earlier. Trust was also mentioned many times in the interviews. The external experts could trust each other and were confident that others did their tasks if they said they would.

The chemistry and trust issues depend on the personalities of the external experts and the managers. The new business model renewal framework can be used by anyone and it is impossible to know the personalities of different people, if the framework is used similarly as in the 'ArvoBusiness' and 'InnoBusiness' research consortium. If the new framework is used many times with the same external experts, the trust and chemistry problems occur less likely, because the experts know at least each other beforehand.

#### **5.3.2.5 Communication**

Communication was also identified as a key success factor, but there were also some suggestions, that it could have been even better. Most of the comments considered the communication to be efficient, but they also identified ways of enhancing it. The following suggestions provide improvement on communication:

*“In my opinion there should have been more meetings with the experts between the workshops, where we would talk about what happens in the technology side and what happens in the business side of the case”*

*“Perhaps the communication could have been better: documentation, regularity and communication to one way and another.*

*“Maybe there could have been more than two people from the company more often in the workshops”*

and

*“I suggested to have a web based work desk where everyone could have shared files and maybe that could have been beneficial... At some point there was this feeling that perhaps more experts could have attended the meetings inside the company to tell the employees about the process.”*

Everyone, however, said that in their opinion the communication was not a problem and actually was on a good level, and the suggestions were considered only minor. A couple of interviewees mentioned about a new web based tool to make the work more transparent that was suggested by the representative of Company 1. They did not consider it to be a big flaw or a mistake not to include it. Also, some interviewees wished more attendance from the companies in the workshops, while the representative of the other company wished more experts to attend the internal meetings of the company. However, this requires time from the experts and the employees. In order to make the communication excellent, it needs efforts right from the beginning. If this is done well, the benefits of clear roles, chemistry and trust increase.

The new business model renewal framework should highlight the importance of the communication. Good leadership increases communication and modern technologies provide several solutions for enhancing communication. A similar web-based tool as came up in the interviews could be one of these technologies. The workshops used in the studied cases also increase the communication, because the managers and the external experts meet face-to-face. These reasons favor the workshop-based way of working.

#### **5.3.2.6 *New personal contacts***

Working in new research collaboration was inspiring for the experts as they got new personal contacts. The experts are able to use the contacts for possible later collaborations, and utilize the experience gained from the cases. This offers a platform for spontaneous meetings and creates new ideas for collaborative working.

### 5.3.3 Mindset

The mindset of dealing with change came up in several interviews. The representatives from both companies said:

*“The idea has been “matured”. Making permanent change does not happen quickly.”*

and

*“All these things [change] require time. One needs to “taste” and feel the new things before making the final decision.”*

The managers needed time to realize that change is inevitable in order to be successful in the future. The change in the mindset is also supported by the literature. Previous success does not guarantee success in the future. The external experts noticed this as well, giving the importance of mindset more validity. The managers may have said that they were ready to change to any direction, but perhaps were not initially really ready to do so. One of the experts said about Company 1:

*“At first, the company had recognized the need for a new business, but there were some insecurity, like they could also keep doing what they were currently doing, indicating that they were not ready to change that radically, even though they stated that they were open to any idea.”*

Because the final business models of both of the cases were something entirely different than their earlier model, there has probably been a change in the mindset of the managers.

While the need for changing emotions was widely recognized, the slow process of it got some criticism. However, the same interviewees also mentioned that the change needs time. Determining the optimal time for changing emotions is hard, because people are different and require different amounts of time. Therefore, the process should have some flexibility in time and experts should try to come up with tools and ways to increase the speed of the change.

#### **5.3.4 Workshops**

The interviewees were asked about the amount of workshops and most of them said that they would not take away any workshops as they felt that all of them were important part of the change process in the case Company 1.

The case Company 2 had too little workshops according to the representative of Company 2. They would have wanted to have them more, because that would have increased communication and made the process end faster. This would have shortened the mind shift period. Then again, their budget was smaller than with Company 1, so having more workshops may not have been possible.

The development method could have also been something else than workshops. The external experts and the managers could have used for example modern technologies and have more virtual meetings. However, the geographical reasons made it possible to have real-life workshops. Meeting in person is good for communication and perhaps exploits better the multidisciplinary backgrounds of the external experts.

#### **5.3.5 Time**

The project was planned to be much shorter than it actually was. Everyone agreed that this was only a good thing for the outcome of the cases, because the change of mindset took more time. However, many interviewees thought that there was too much extra time, and the cases could have been shorter. According to the dataset there were some bigger gaps between some workshops, indicating that the cases could have been shorter in great conditions. Representative of the Company 1 estimated that perhaps a year or year and a half would be optimal time for the business model renewal process. The studied cases lasted over two years.

One of the reasons for the long finishing time of the processes was the large research consortium. The proposed new framework only concentrates on the business model renewal, which eliminates extra coordination.

#### **5.3.6 Collaboration with other companies**

The representative from the Company 2 mentioned that they would have wanted to develop the business model together with other participating companies, but it did not happen because of the too long schedule and the companies were too different.

The similarities between the companies selected to the project were only geographical, as all of the companies were operating in the same area in Finland.

This is a valid point and deserves some consideration in the future processes. If there are synergies that can be achieved with collaboration with other companies, they should be pursued. Working in collaboration with other case companies is also an example of the open innovation process highlighted in the literature.

The new business model renewal process framework concentrates on one company only, but in different phases of the process other companies can be used, if it provides benefits. However, as business models may contain some critical and classified information about the company, some consideration should be put on which companies to involve in the process.

#### **5.3.7 Timing of customer interviews**

In the first case the customer interviews were held already during the ‘Planning’ phase, which was considered to be beneficial for the process. However, it was not the case with the Company 2. A person from Company 2 said that they would have wanted the feedback from the customer interviews earlier in the process. The customer interviews were done quite late, and thus were not able to help the development process as well as they could have. Having pilot customer makes the experimentation easier, and literature heavily suggests including experimentation in the development process as early as possible.

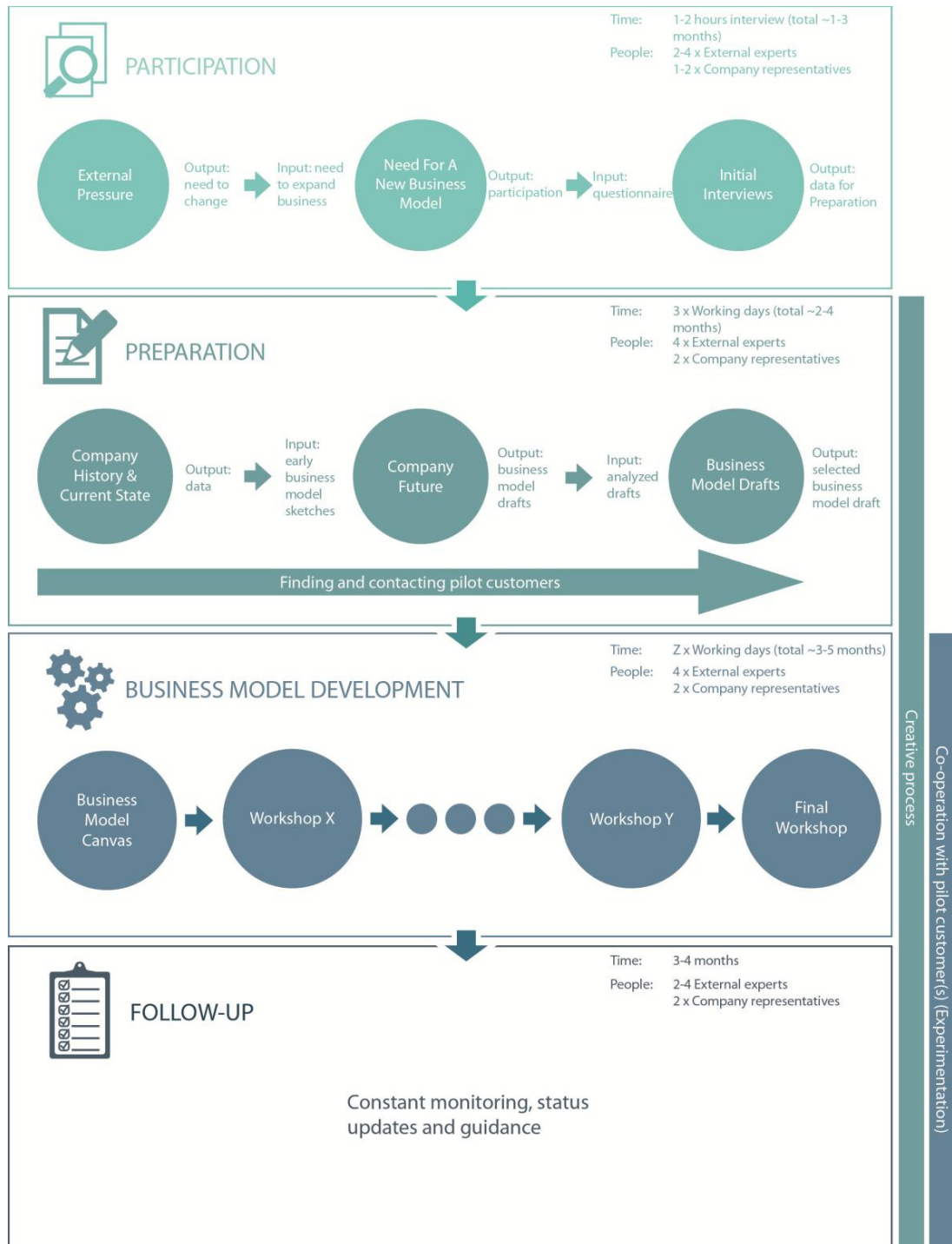
## **5.4 The framework of a new business model renewal process**

### **5.4.1 Overview**

The final results of this study are based on the literature review and the analysis of cases and interview data. The result is the new framework of a business model renewal process. The new framework utilizes external experts with different backgrounds. The framework provides estimates about the resources needed in different phases of the process, which are based on the studied cases. Knowing the rough estimates of the resources helps possible users of this process to identify the time and people needed when implementing the process. This helps the managers to make the investment decision on whether to implement the process or not. The framework also provides information about critical steps in the different phases of the process. The framework is designed to utilize workshops. The process is suitable for at least a renewal of a new business model for a new service for small to medium sized enterprises in Finland with the help of the external experts.

The framework is not strictly determined process. Renewing business models or doing any process ends up often being a bit different from the initial plan no matter how well you plan it. Because business model renewal process is such a creative process, there needs to be room for quick adjustments. The same effectuation principle applies to the business model renewal process as it applies to the actual renewing. Managers and external experts need to act with the existing data and go to any direction they can with them. Therefore the themes for the future workshops in the development phase can not always be identified right away. The experts and managers can think what they could be, but they should not spend too much time on it and be ready to make changes.

The process describes different workshops external experts should organize for managers. It does not, however, mean that the development work only occurs during the workshop. The managers and external experts should have continuous work on the new business model. The proposed framework of the business model renewal process is summarized in Figure 10. There should be about four external experts and two company representatives in the process and the whole process lasts between ten to fifteen months.



**Figure 10 the new framework for the business model renewal process**

## 5.4.2 Participation

### 5.4.2.1 Overview

The participation phase is summarized in Figure 11. The renewal process in this framework starts with external pressure. The external pressure causes a need to change. The change can be achieved with several ways, like cutting costs or expanding into new businesses. This framework is applied when the last option is being pursued. The need to expand into new businesses leads to the need for a new business model. The managers can be out of new ideas, or willing to have fresh outside views on their businesses, or they look for saving money in the development process, which drives the company to take part of the business model renewal process organized by external experts.

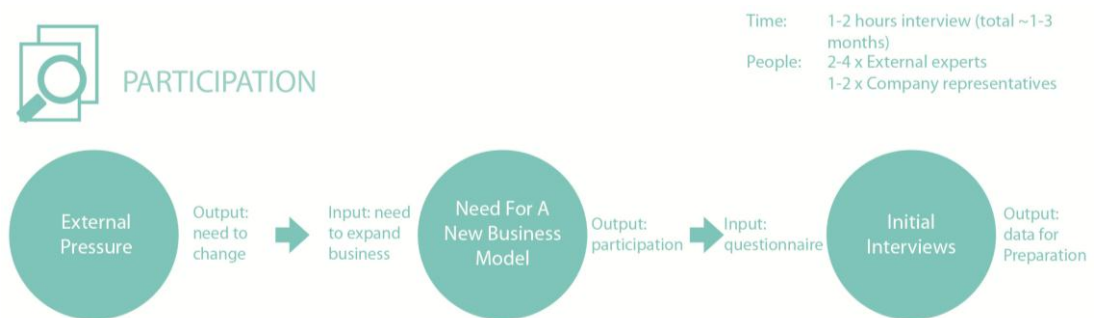
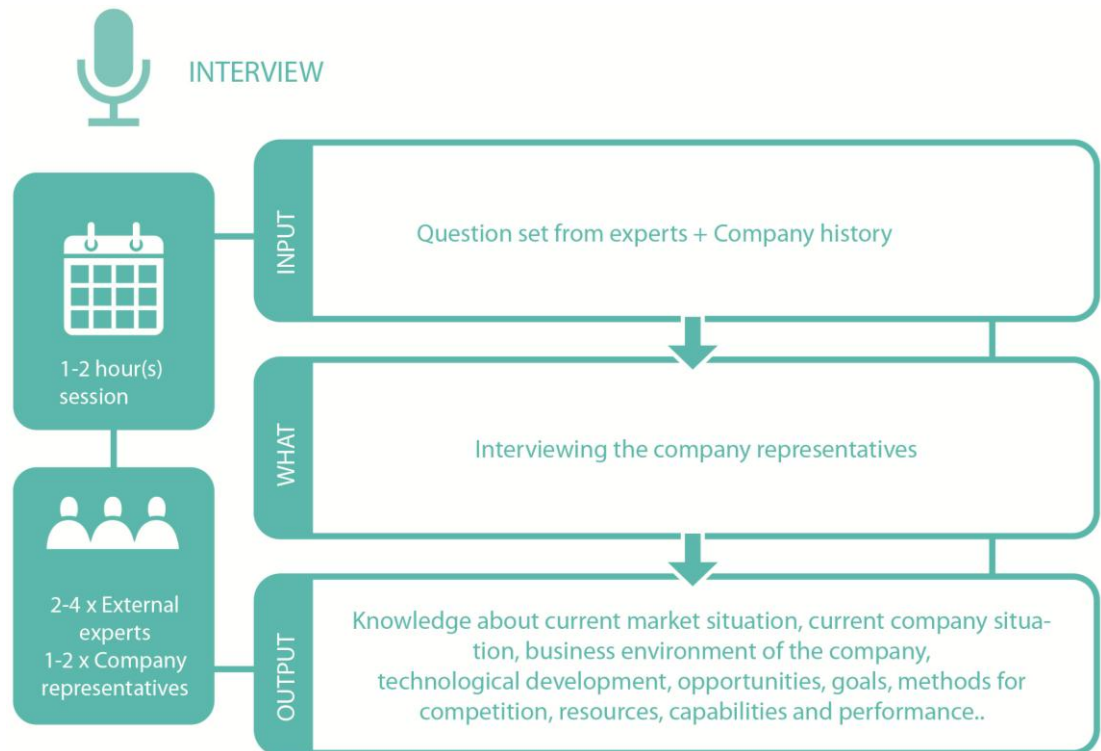


Figure 11 Steps in the 'Participation' phase

The final step in the participation phase is the initial interview (Figure 12). Before the interviews the external experts prepare the questionnaire. In the interview the external experts ask questions from the possible company candidates, which provide data for the rest of the process. In addition, the final participation of the case company is either accepted or declined.





**Figure 12 Initial interviews**

The interview lasts between one to two hours. As many external experts and company representatives as possible should attend the interview in order to maximize the communication. The external experts prepare the questionnaire for the interview. After the workshop, the experts should have initial knowledge about the current market situation, current company situation, business environment of the company, technological development, opportunities, goals, methods for competition, resources, capabilities, and performance, among others. The information acquired at the interviews only scratches the surface, but it makes it easier for the external experts to decide whether to develop the business model or not. If the experts feel they have the necessary skills to develop the business model for a company in a certain field, the next phase is started.

#### **5.4.2.2 Critical success factors**

The process should start with pure commitment from the managers of a case company in order to get maximum results. Especially, if the business model is decided to be renewed without any external pressures, the managers should prepare themselves to really want change and start communicating in their own company

about it. The change management should be started as soon as the need for change is recognized.

The external experts should define clear roles and appoint a manager to coordinate the process. This increases the chances of a successful process and the likelihood of overcoming challenges related to group functioning. Early parts of any process are important for the success of the rest of the process. One of the interviewees used a metaphor: in line of many dams, if you decrease the water going through the first dam, the rest of the dams will have only that amount water going through them and no more. The business model renewal process, however, is not an isolated system and extra efforts can be made along the way, but the needed efforts are reduced if the beginning is dealt with care.

#### **5.4.2.3 Resources**

The resources in the first phase of the process are the time consumed to commitment by managers and efforts of searching potential development targets by the external experts. The time consumed depends on how fast a suitable case company is found or how fast the managers make the decision to change the business model. The external pressure can exist for variety of time before manager reacts to it as different managers react differently to outside pressures. The initial interview takes between one and two hours and there should be as many attendees as possible. As the optimal group size proposed in this framework is four, there should be from two to four external experts and from one to two company representatives. The total time in the 'Participation' phase lasts approximately one to three months.

### 5.4.3 Preparation

#### 5.4.3.1 Overview

The next phase of the process is called ‘Preparation’ and, according to this framework, it involves three workshops. The workshops are called ‘Company history & current state’, ‘Company future’, and ‘Business model drafts’. At the same time as the experts prepare for each of the workshops, company starts to look for potential customers and contacting them with the information they already have. The contacting of pilot customers gets more intense when the first drafts are built and the final draft selected. The new potential customers should also be interviewed, if they are already found during the planning phase.

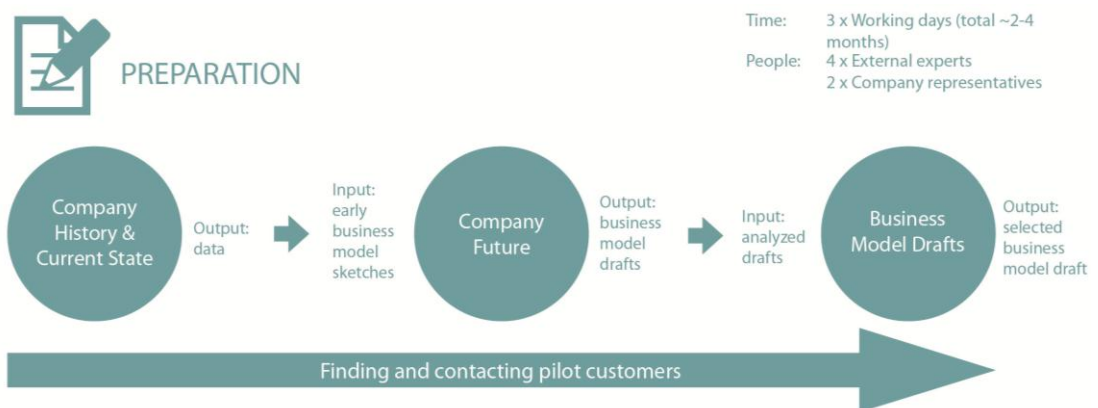
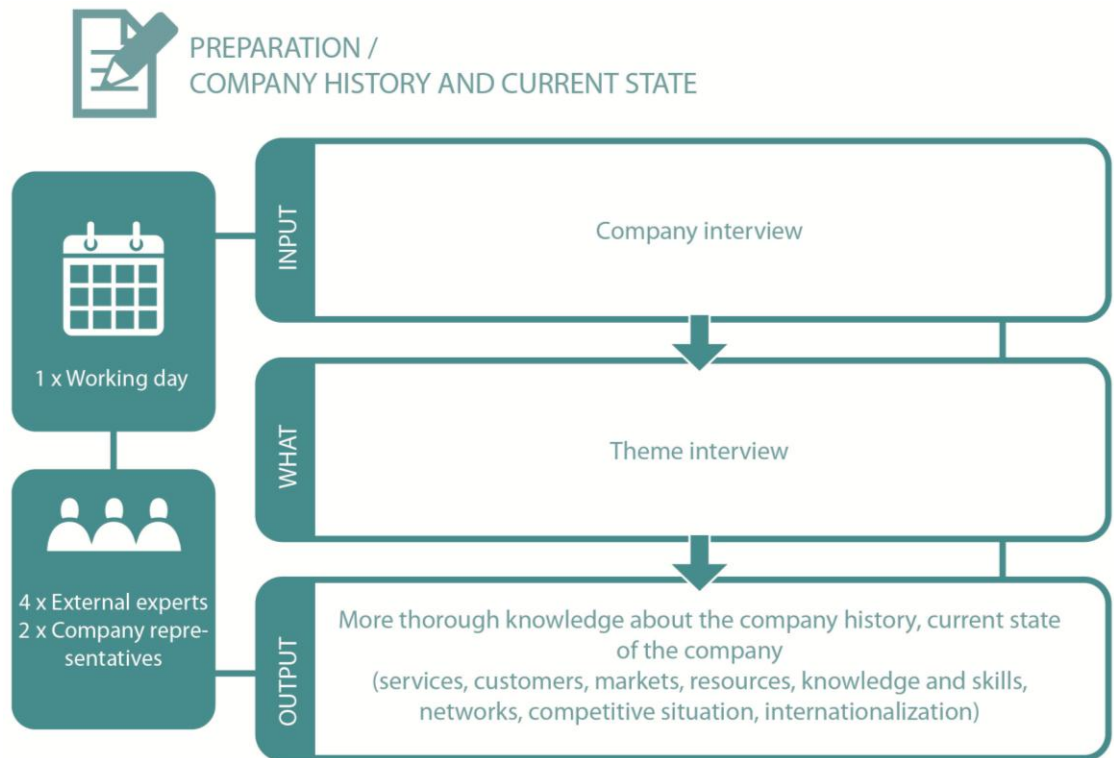


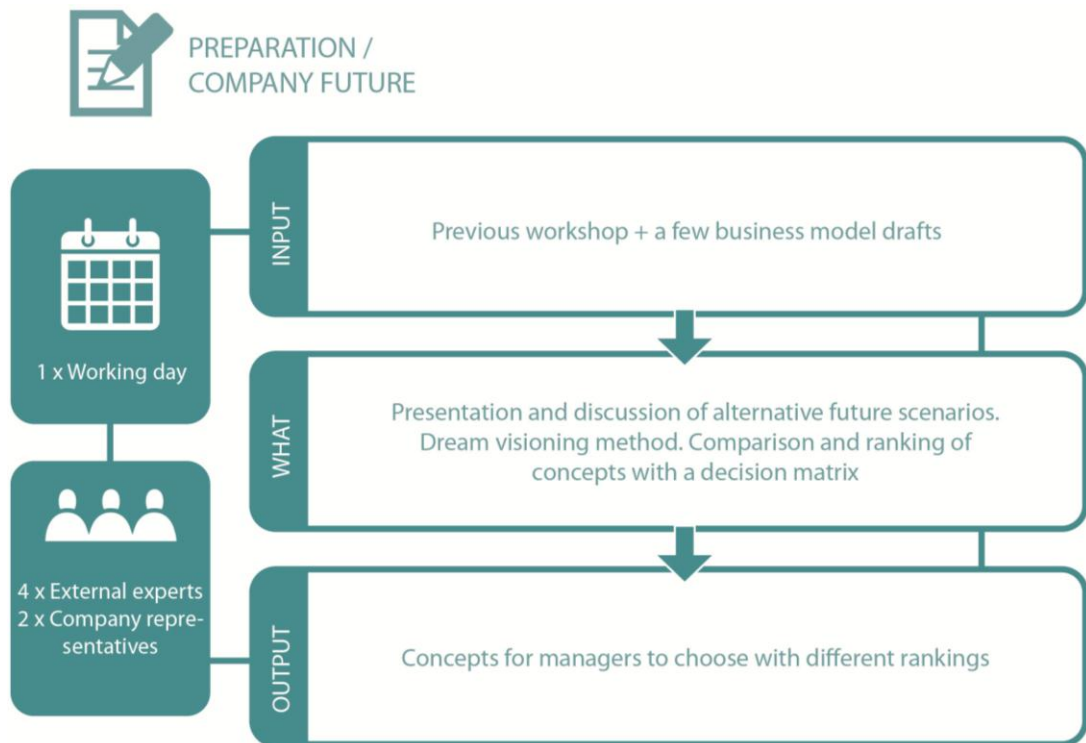
Figure 13 Steps in the Preparation phase

The first workshop is called ‘Company history & current state’, where the external experts identify the key aspects of the company. The workshop is summarized in Figure 14. The workshop has some overlapping themes with the initial interviews, but the workshop goes deeper into details. As the name suggest, the workshop tries to find answers of the historical turning points and the current state of the company. This prepares them to identify how the company could change and builds the basis for the next workshop. The data received from the workshop is used by the external experts who design the early business model sketches for the next workshop from this data.



**Figure 14 ‘Company history and current state’ workshop**

The early sketches of business model drafts are used in the ‘Company future’ workshop to create possible future scenarios of each sketch. They are created with the dream visioning method. First, the desired future state of each sketch is identified, and worked backwards to identify the steps needed to get there. Each sketch is compared and ranked with a decision matrix. After the workshop, the managers should have a few business model drafts, which they analyze more carefully before the next workshop.



**Figure 15 ‘Company future’ workshop**

In the ‘Business model drafts’ workshop (Figure 16) the model to be developed is decided. In addition, the end product of the whole business model renewal process is estimated. After the workshop, the external experts should have data for the rest of the process and the possible pilot customer interviews. If possible new pilot customers have been found in this ‘Preparation’ phase, they are interviewed, and their participation for business model development is agreed or disagreed.

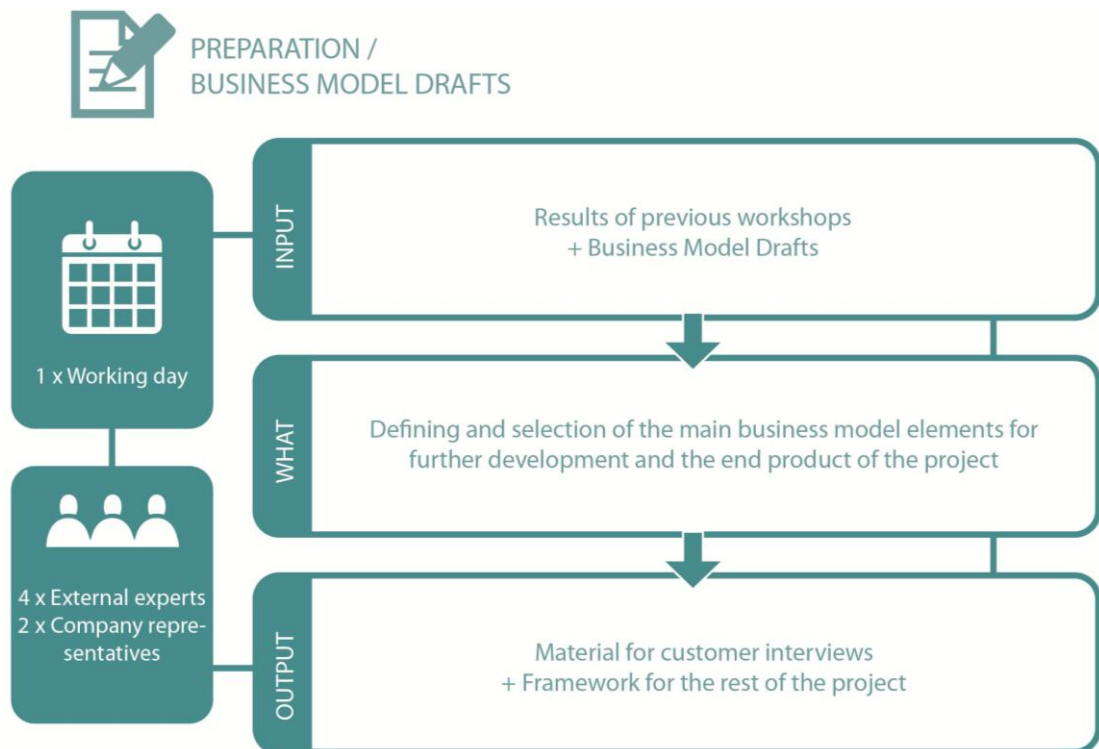


Figure 16 ‘Business model drafts’ workshop

#### 5.4.3.2 Critical success factors

Here the commitment acquired in the first phase is seen in action. In the preparation phase, everyone should be involved in order to build the trust and chemistry. In addition, involving everyone allows all the ideas from the multidisciplinary external experts to be spread out.

The early business model sketches designed by the external experts are very important, because they define the progress of the rest of the process. One of the sketches is chosen for the rest of the process, which means that the few sketches should be high quality. Naturally the sketches do not need to be comprehensive and they are developed during the process, but designing of them should receive a lot of attention.

Another key factor is to find the pilot customers so that they can be used during the actual business model development phase. This is not necessarily an easy task depending on the type of business, as was evident in the case Company 2.

### 5.4.3.3 Resources

The ‘Planning’ phase lasted about six months altogether in the case Company 1. There was a bit longer gap between the last workshop and customer interviews, so it could be shortened in a planned process. The workshops were held within two months, which is not a bad time considering the slow process. The customer interviews should be done as soon as possible after the final workshop, or even earlier, if possible. Once again the timeframe is hard to be estimated, but the optimal time for the preparation phase should be somewhere around two to four months.

All the experts are needed in the workshops in order to get the most out of the multidisciplinary people. In addition, the external experts need to do the necessary preparations for the workshops. If similar processes have been implemented several times by the same experts the preparation time decreases because of earlier experience. Managers need to be committed to the change and actively communicate about the progress of the process within the organization.

## 5.4.4 Business model development

### 5.4.4.1 Overview

Next phase is called ‘Business model development’, which is the actual development phase (Figure 17). This phase in this framework is the most flexible phase of the process. It consists of different workshops. The amount of workshops is determined by the budget of the process and the needs of the case company.

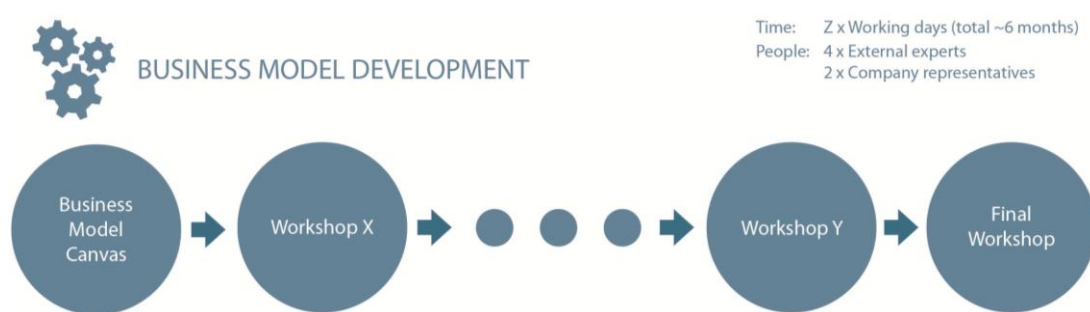
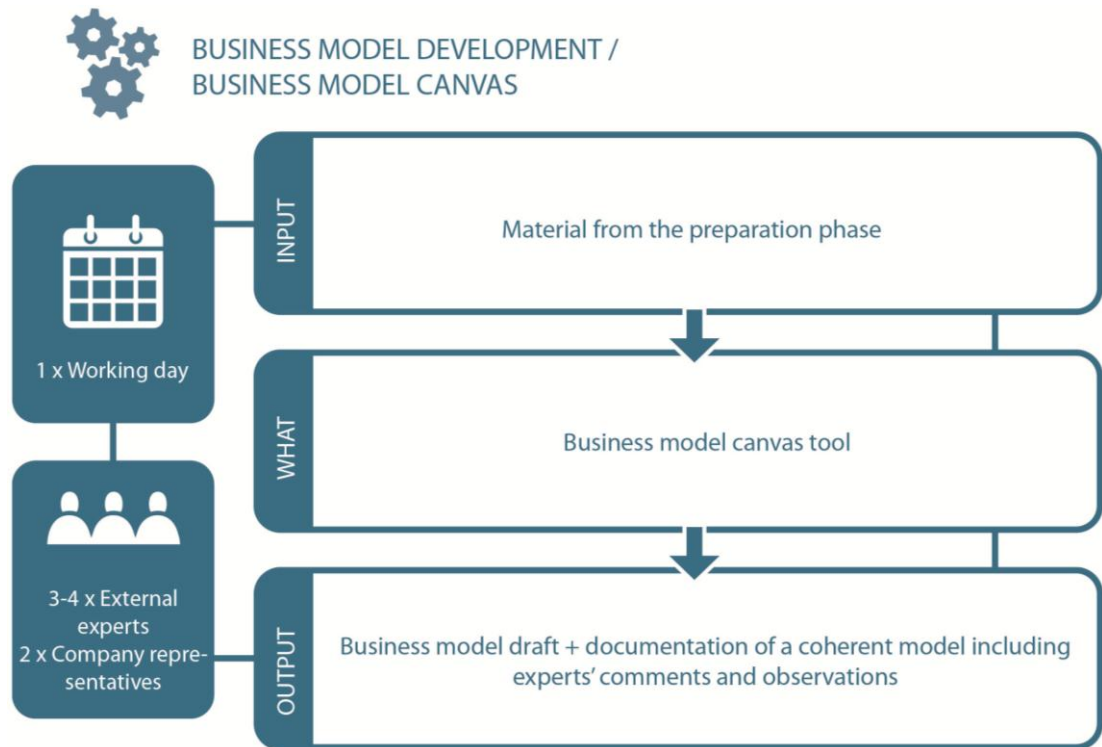


Figure 17 The steps in the ‘Business model development’ phase

However, using the ‘Business model canvas’ workshop as the kick-start should work for most companies, if the earlier steps have been done according to the plan. The canvas workshop puts together all the elements of the first business model draft designed which were earlier chosen to be developed, and starts the development

process of the business model. From this workshop, the managers and the external experts can easily see which parts of the business model to develop further with different workshops. The workshop is summarized in Figure 19.



**Figure 18 'Business model canvas' workshop**

The next step includes all the development workshops that participants of the process want to have. Here is not any clear path which workshops one should choose, because of different kinds of businesses, people and situations. However, one could choose from a list of workshops that have been used in the two cases in this study. These workshops are:

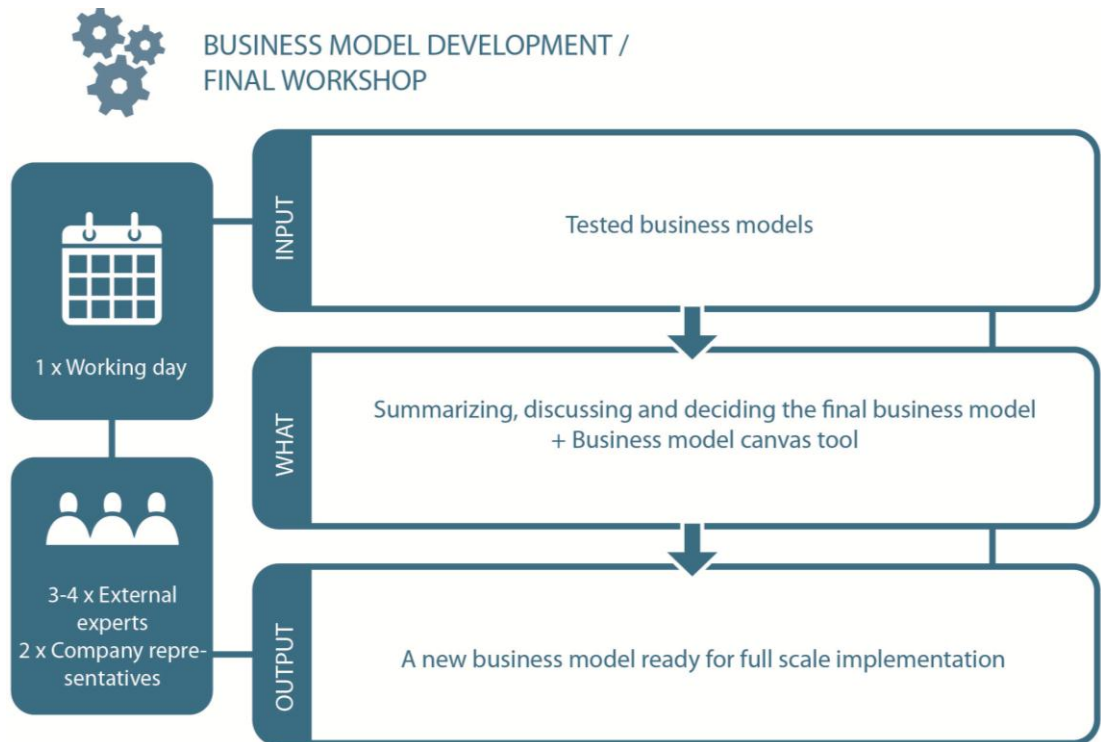
- Technology knowledge and skills
- Competitive advantage
- Customer criteria and service process
- Customer portfolio
- Dream visioning
- Fast experiments workshop



The workshop could be something else also. If there is a suitable workshop that is aimed to develop a certain part of the business model, it can be arranged. One of the interviewees said, “Business model design is an art, not science”. It is true that creative processes should not be restricted too much, and the external experts and the managers should have freedom to have different workshops.

Whatever the workshops in the ‘Business model development’ phase are, between the workshops experimentation should be implemented. The experimentation should use double-loop learning. In every workshop there are probably some changes made to the business model. The managers should test these changes with the pilot customer after this workshop. In the next workshop the feedback of the experiments should be discussed with the external experts. If the feedback of the experiment is positive, the changes made in the previous workshop should remain in the business model. If the feedback is negative, the changes should be discarded or changed to something else. This double-loop learning keeps the experimentation going and also keeps the external experts involved in the experimentation process. In addition, the experimentation is likely to promote new ideas as well.

The final workshop of the ‘Business model development’ phase should be somewhat similar in every process. In the workshop the final version of the business model is concluded, discussed and decided. This helps everyone to understand the main elements of the new business model and it helps the full-scale implementation process.



**Figure 19 Final workshop**

#### **5.4.4.2 Critical success factors**

Experimentation should be started with the pilot customer as early as possible, and the model should be adjusted according to the feedback of the experimentation, as the literature suggests. The double-loop learning used in the experimentation has at least following benefits:

1. idea creation happens in an open and informal situation
2. ‘peer pressure’ pushing the case company to experimentation from the early on
3. the results are shared and analyzed with experts of different fields
4. encouragements to do experimentation again even after a failure

The development process should be dynamic in nature, where the managers and the external experts challenge each other to get the best effort from everyone. In addition, the creative working should not only apply during the workshops. It should rather be a continuous process happening simultaneously to the whole process. This means, that new ideas can come up in any situations, not just in workshops.

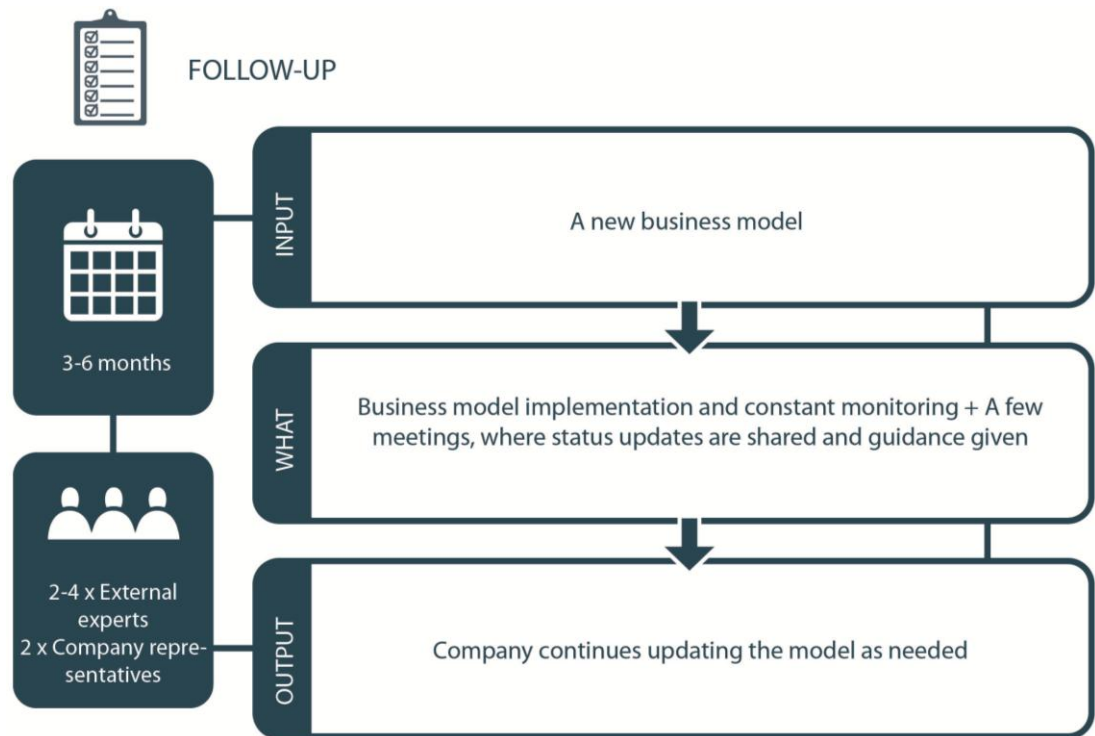
#### **5.4.4.3 Resources**

Time variable depends on the budget of the process, and the amount of the needed workshops. For example, this phase for Company 1 lasted a bit over three months, in which six workshops were held. The rate of workshops was, therefore, about one workshop per two weeks. The rate seems reasonable, and three months is the lower boundary of the time frame. This part should not be done any quicker, because the managers need time to do the experimentation and collect the feedback. The upper boundary for the time frame is somewhere around five months, because more workshops than this time boundary allows can be too pricey for the company.

The external experts should attend as many workshops as possible to create the system where the communication works and the company gets the full benefits of the multidisciplinary expert team. Four experts and two company representatives are good amount of people in each workshop, unless some field in a certain workshop is not needed. In addition, employees from the case company could attend some of the workshops to increase the communication within the case organization, if possible.

#### **5.4.5 Follow-up**

The last phase in this framework is the ‘Follow-up’ phase, in which the company takes the new business model more into action and scales it up, if everything has worked well. During this phase experts should organize follow-up meetings with the case company where all necessary information about the progress of the implementation is shared and discussed. This way the experts can give more suggestions for the future of the new business model and possible errors in the model can be fixed. The amount of follow-up meetings should be flexible. If the new model starts working right from the beginning, the follow-up meetings become less valuable and only consume the valuable time of the managers and the experts. However, the follow-up meetings become more important, if the new model cannot be scaled up as planned right away.



**Figure 20** The 'Follow-up' phase

#### **5.4.5.1 Critical success factors**

One should not forget the ending of the process. In this case, the external experts should ensure the smooth and effective transformation of giving the case company full responsibility of the new business model. Managers should also act soon if problems occur and give status updates to the external experts.

#### **5.4.5.2 Resources**

The resources on the company side are tied with implementation of the new business model. The implementation phase requires a lot of work from the managers. The effort from the external experts is quite low in this section, because they only need to organize one or two meetings with the case company and monitor the implementation process.

The time of the 'Follow-up' is flexible. In the cases studied in this study, there were a few meetings in a span of four to six months. In optimal conditions the phase can be shorter, and is estimated to last about three to four months.

## **6 Discussion**

### **6.1 Reaching the objectives**

The objectives set for this master's thesis are met and a new framework for the business model renewal process is created. The framework utilizes the external experts with multidisciplinary backgrounds. The framework is applicable at least for small to medium sized enterprises, which are pursuing a new business model based on a service product. The framework includes the key steps in the process, and critical success factors and resources needed in each step.

### **6.2 Reliability**

The actual results of the new business models of the case companies studied in this thesis are seen few years later, because the new business model needs to be scaled up and be operational for a few years in order to see possible increases in revenue and profit. However, the initial results suggest the new business models are successful, as both of the cases have already managed to get new significant customers.

The themes found in the literature by different authors are used in the framework. When different authors come up with similar conclusions about the same topic, the conclusion gets naturally more validity. The framework proposed in this study should, therefore, be somewhat reliable, because not only it has some evidence on it in practice, but in literature as well.

Statistically a large amount of the new businesses and business ideas fail (see for example: Freeman, et al. (1983); Christensen and Raynor (2003)), so the proposed business model renewal process does not guarantee success. The suggested model only provides the frames and a blue print for the external experts and the managers if similar research collaboration is being used in business renewal process in the future.

The case Company 2 had less data in the dataset than the dataset for the case Company 1, which caused some challenges in identifying the process of the case Company 2. However, the interviewees were asked to compare the cases, which gave the analysis more credibility. The actual results of this study are very similar to the progress of the case Company 1. Some changes were made to enhance the acquiring of the pilot customers and some parts were highlighted because of their importance

in the business model renewal literature. The business model development phase was also different because all the workshops used in the case Company 1 are not necessarily suitable for other companies.

The framework should work at least within the boundaries mentioned in the objective of this study and the cases. The two studied cases show that the current boundaries of the framework are realistic. The boundaries could, however, be broader. To get more information on this, more research is needed.

### **6.3 Practical implications**

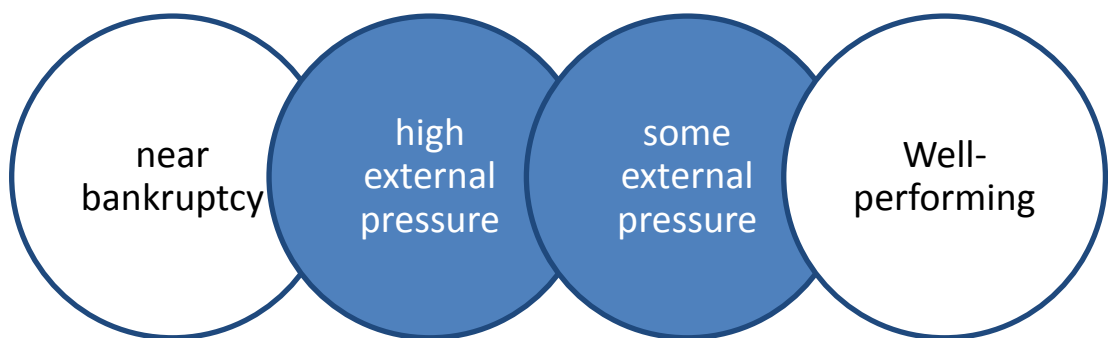
This study was made so that the outcome of the study would help the managers and the external experts to renew the business model in collaboration, if the company of the managers is facing external pressure. Many of the people in the mini workshop said that if they were to have had the blueprint in the beginning of the process, all the identified challenges and problems would have been much easier to overcome. The main benefit for external experts and the managers of this study is the business model renewal map included in the framework.

The external experts of different research units designed the workshops, which formed the basis for the creation of the new business models for the case companies. This approach could also be used by any consultants or advisors, who have multidisciplinary background. The benefits of using different external experts from different research units provide ‘freshness’ to the ways of working, if the external experts have not worked together before. If this framework is being used by for example management consultant firms several times, the ways of working can become rigid and narrow down the possible new ideas. Of course this is only a minor problem and routines do provide some benefits as well, but it is worth noting that the business model renewal process needs creative atmosphere in order to be successful.

In addition, the studied business model renewal processes had a lot of workshops. The business model could also have been developed with several other methods, like utilizing e-learning, or other new technologies. These methods are ignored in this study, because in the studied cases the geographical reasons made it possible to have workshops. The communication should be at a high level in face-to-face situations and meeting in person can be considered to be more reliable than using different

technologies. As business model renewal requires creativity, perhaps meeting in real life provides the best creative atmosphere. The external experts and the managers are able to use different physical tools, pens, paper, blackboard, and similar, which may be hard to use in a video conference. Even though the proposed framework is based on workshops, the possible users of this framework can use any other method as well. The themes of the workshops, however, should be gone through also with the different method in order to this framework to be functional.

The external pressure in this framework is considered to be around in the middle of a scale of nearly bankrupt company and well-performing company. If a company is close to the bankruptcy, this framework can not be applied. This framework requires time and resources, which poorly performing firms are lacking. The company near bankruptcy needs quick decisions and changes. Well-performing firms are not taken into the account on this framework either, because the framework assumes at least some kind of external pressure and offers changes relatively quickly. Figure 21 summarizes the situations in which this framework is the most suitable.



**Figure 21** The most suitable situations to use the framework

## **6.4 Contribution to the existing literature**

This study contributes to the business model literature by offering a new framework of the business model renewal process. More precisely, the framework is designed to be used by external experts and the managers of the company. The results do not give a suggestion of generalized business model innovation process that Sosna et al. (2010) were asking for, but offers a business model renewal process from a different perspective and in more detail. As said in the beginning of the literature review, the business model is a rather new concept and the business model innovation process is even newer, so this study is one piece in developing more comprehensive literature.

The major benefits of this study to the literature is the wrapped up business model renewal process, that includes and highlights different aspects that are important in the literature of business model renewal or business model innovation. Literature heavily supported experimentation in business model renewal, which is used in the framework. In addition, effectuation, open innovation and dealing with change resistance are also taken into account. Many of the other studies concentrate on only one aspect of business model innovation, but this framework combines them and is more useful in practice.

## **6.5 Further research**

Further studies on this framework should be done to get more reliability. The proposed business model renewal process should be tested in real life with several other companies and several other business environments. This would provide insight about in which situations the framework really works. In addition, one could try to calculate the success rate by conducting many processes with this framework and try to find why some of the processes done with this framework worked and why some did not.

In addition, the current proposed framework could be developed further, if any interesting concepts that were not included in the current model are found. Hopefully the proposed model can work as inspiration for other researchers to study the same topic and try to find an even better framework.

One of the development or research targets of this framework is that one could also study the same process by using different way of working than using workshops. Technologies of today allow several kinds of tools and methods to use in development work. For example, perhaps the development could have been done quicker with virtual meetings. If researchers would be able to conduct several renewal processes with this framework with some other method than workshops, more information would be received about which way of working suits best for different situations.

Another aspect that needs additional research is the fields of the experts. What are the most important fields of the experts in a business model renewal process? Should the knowledge of the experts lean more to the business literature, technology



literature, design literature or something else? This framework does not take into account the backgrounds of the experts, but only suggests that they should be multidisciplinary. The backgrounds of experts in this study were related to business and technology.

In the 'Preparation' phase the external experts design early business model sketches for the rest of the process, which is very important part of the new framework. This master's thesis did not concentrate on how the external experts did the initial sketches, but rather mentions that they should be done. The framework lets the users of the framework design the sketches with whatever method they see fit. However, another future research could study the best way to design the business model drafts. Literature includes different business model frameworks, which could be applied, when designing the initial sketches.

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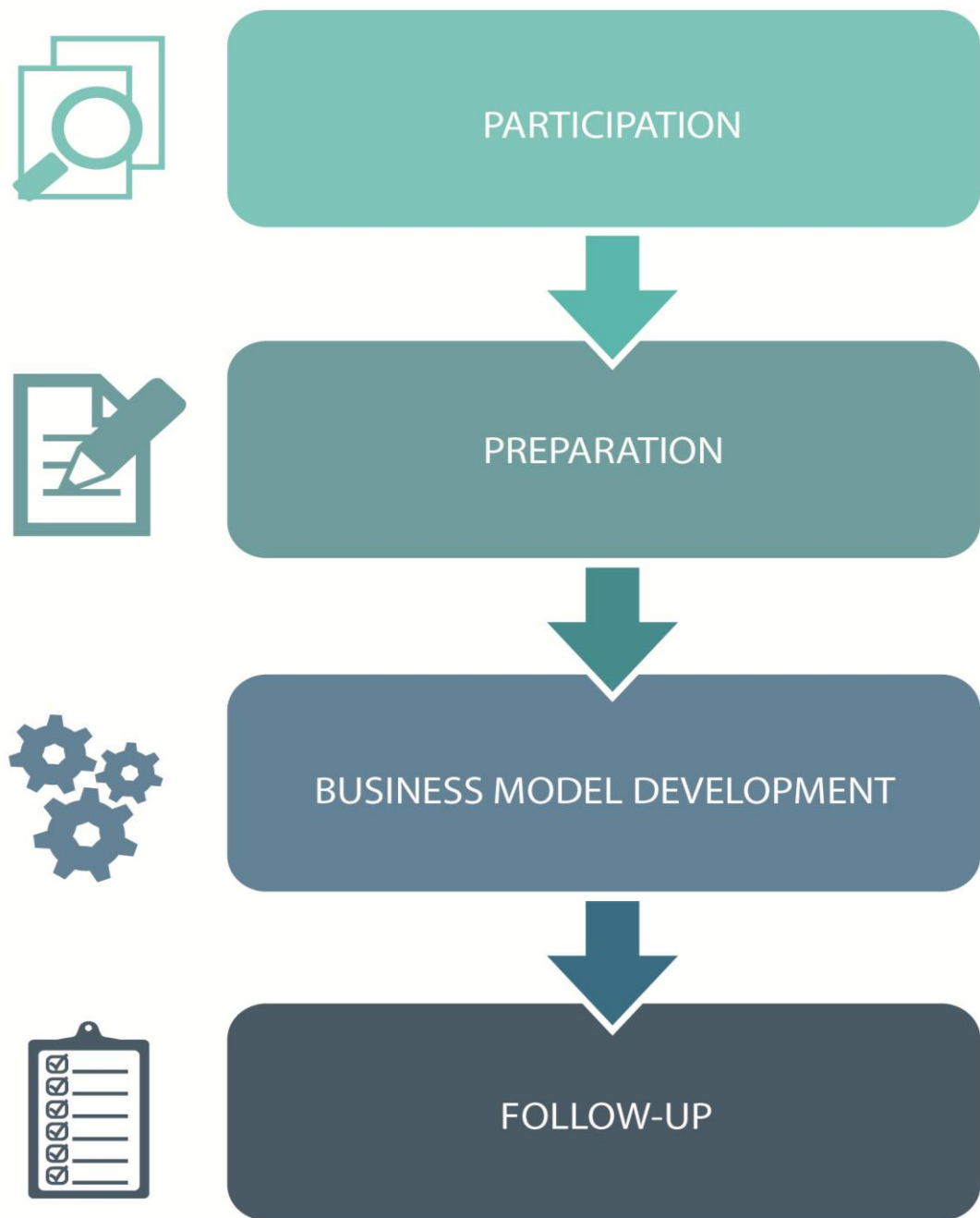
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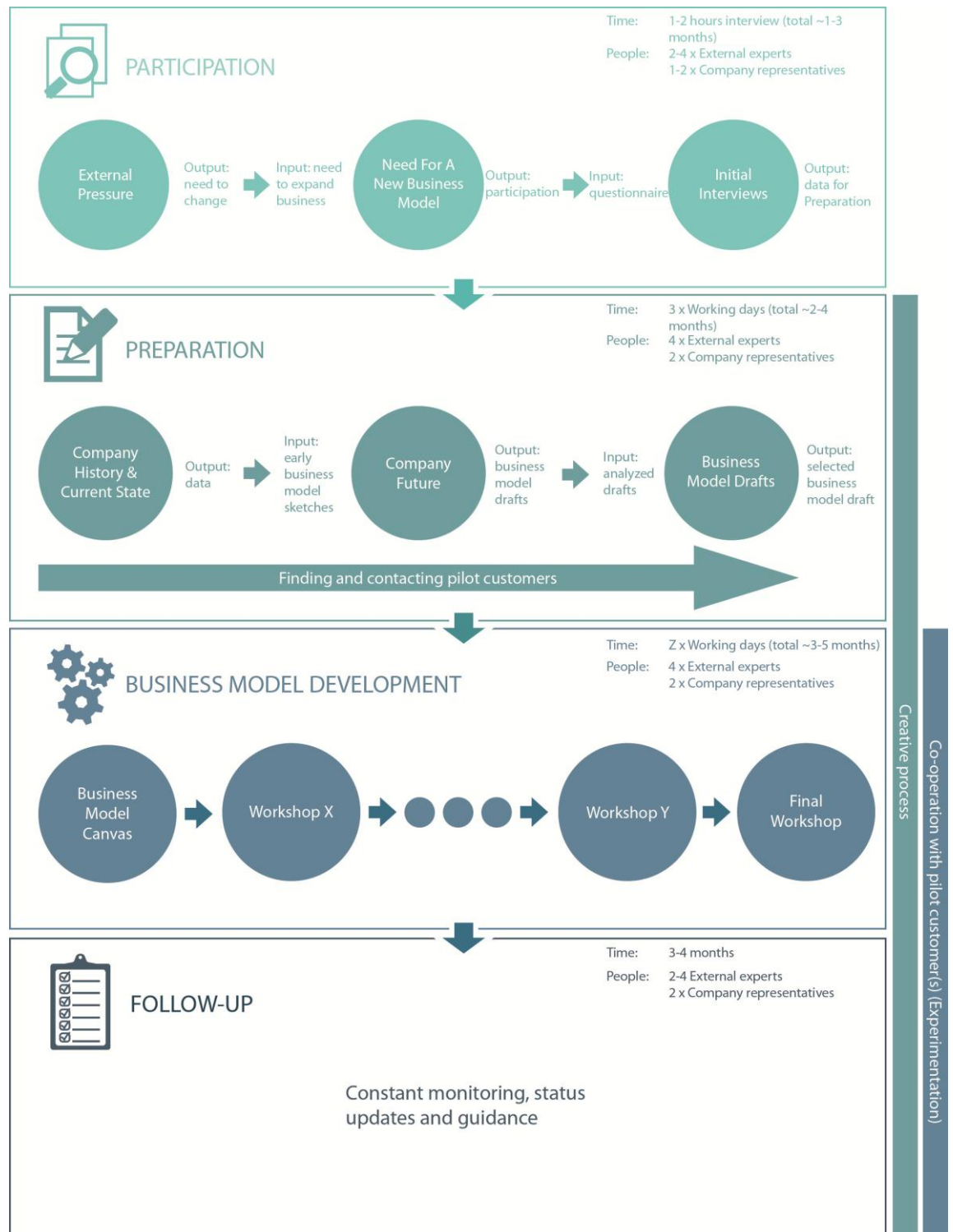
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## Appendix 1: Business model renewal process map

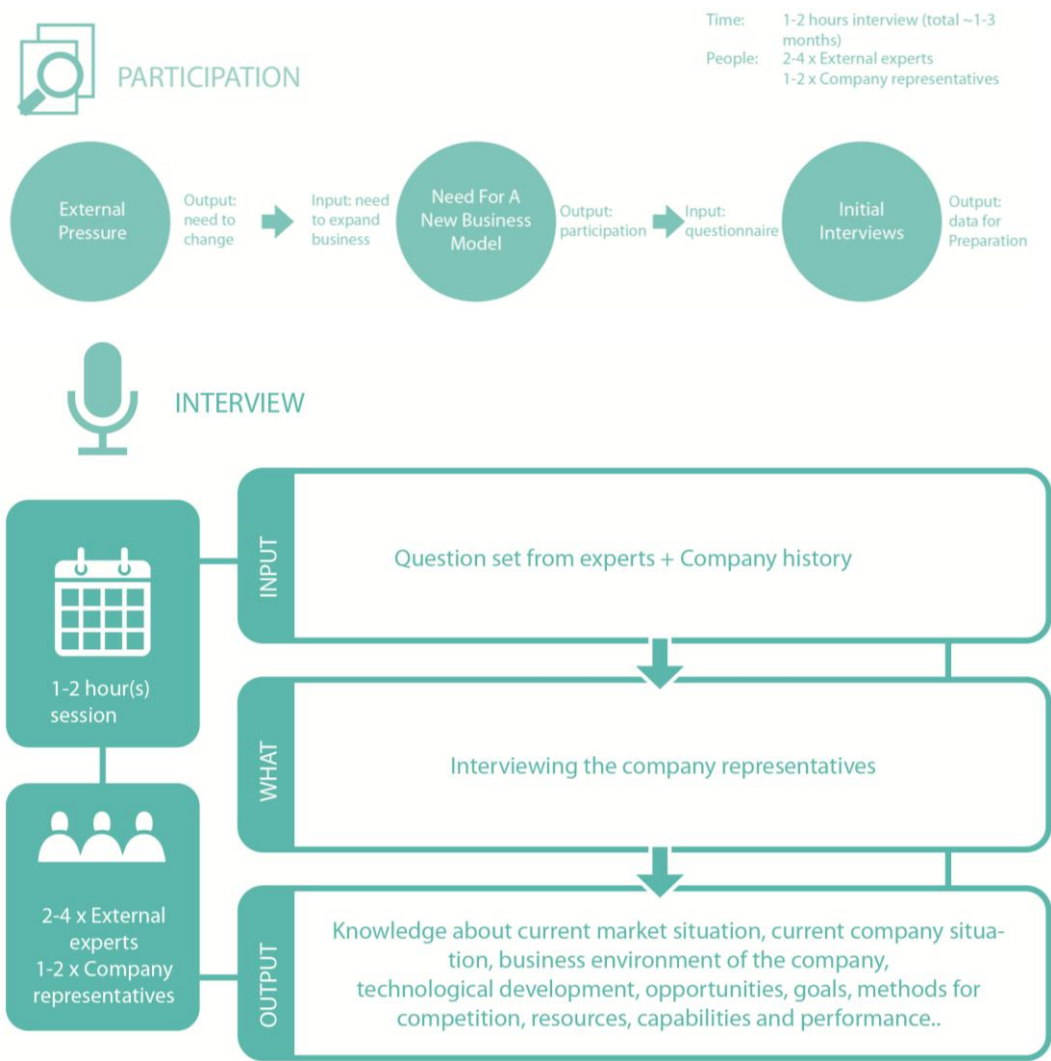


## Appendix 1: Business model renewal process map

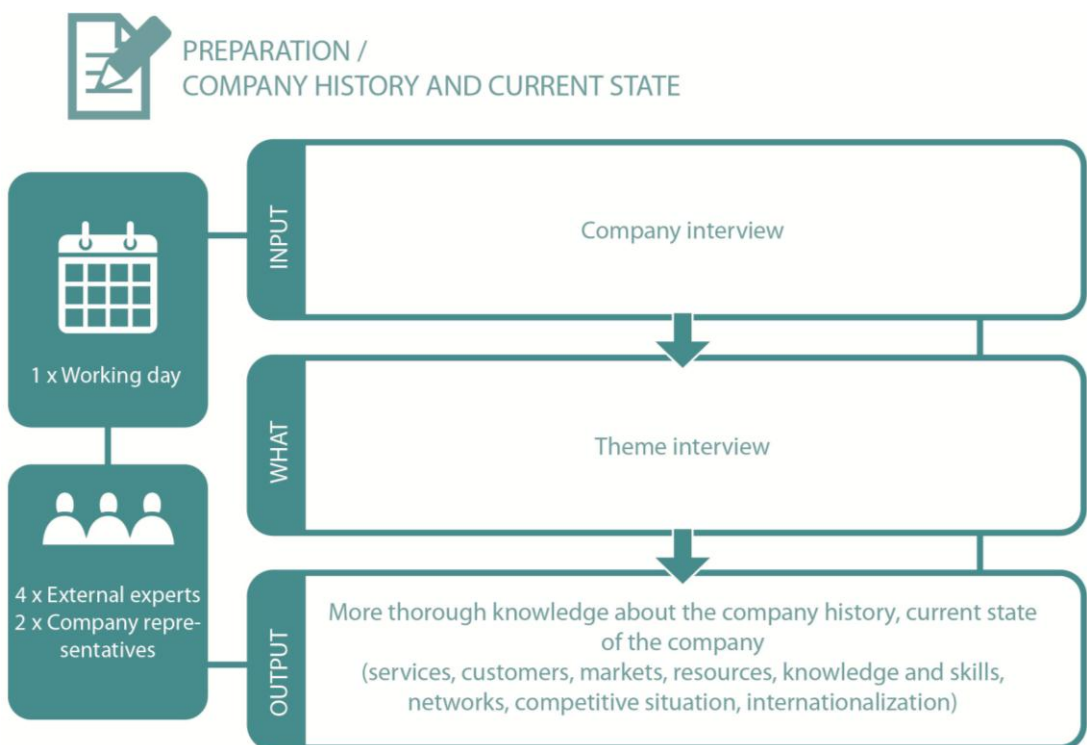
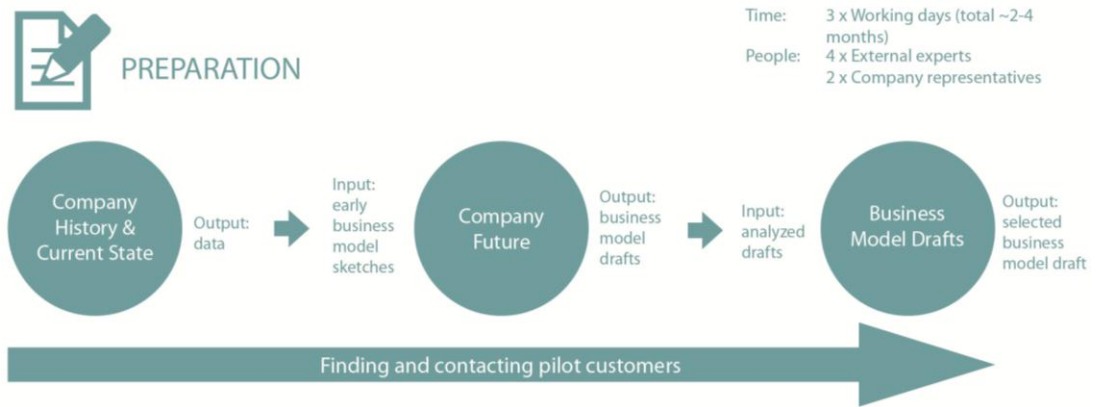




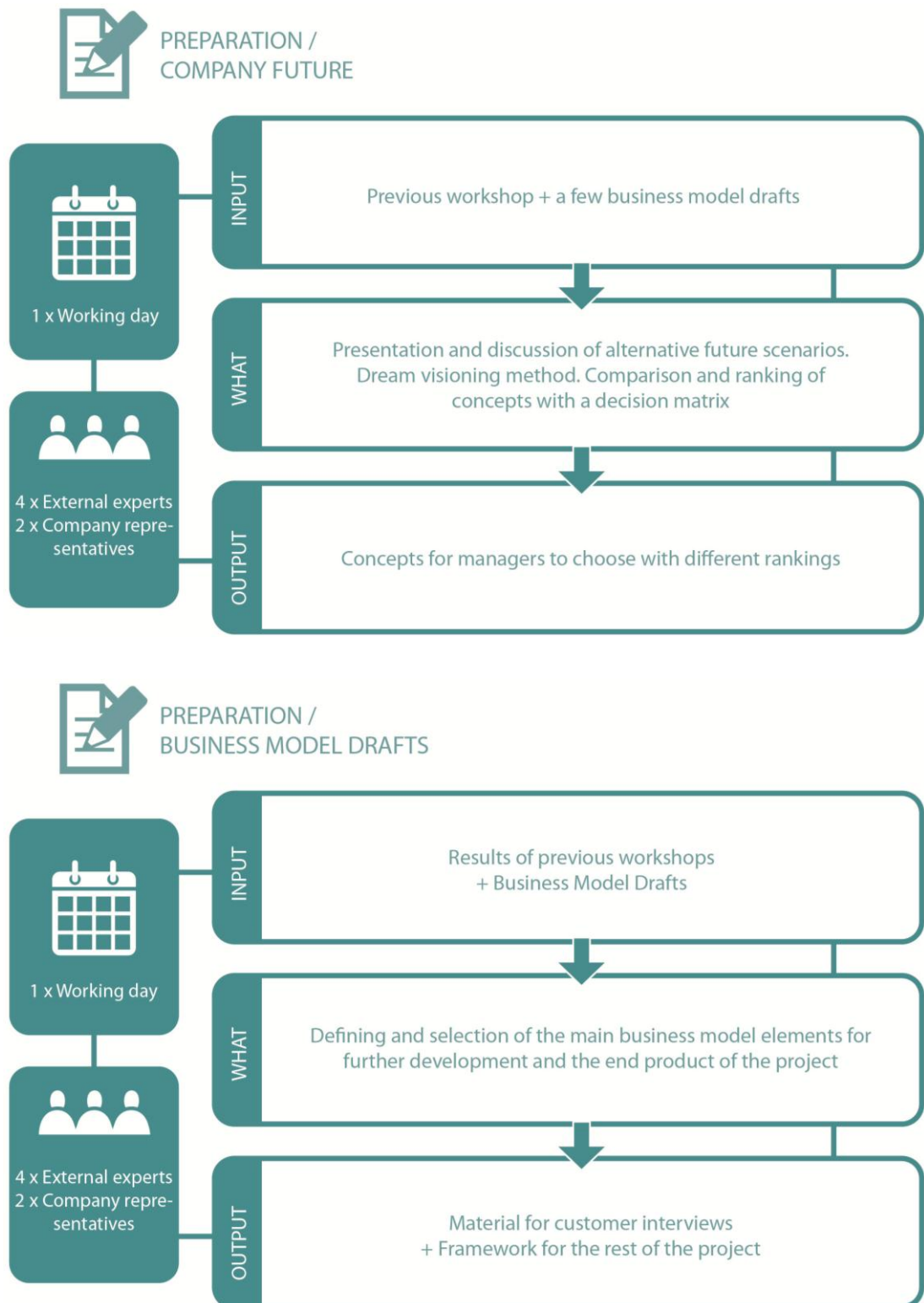
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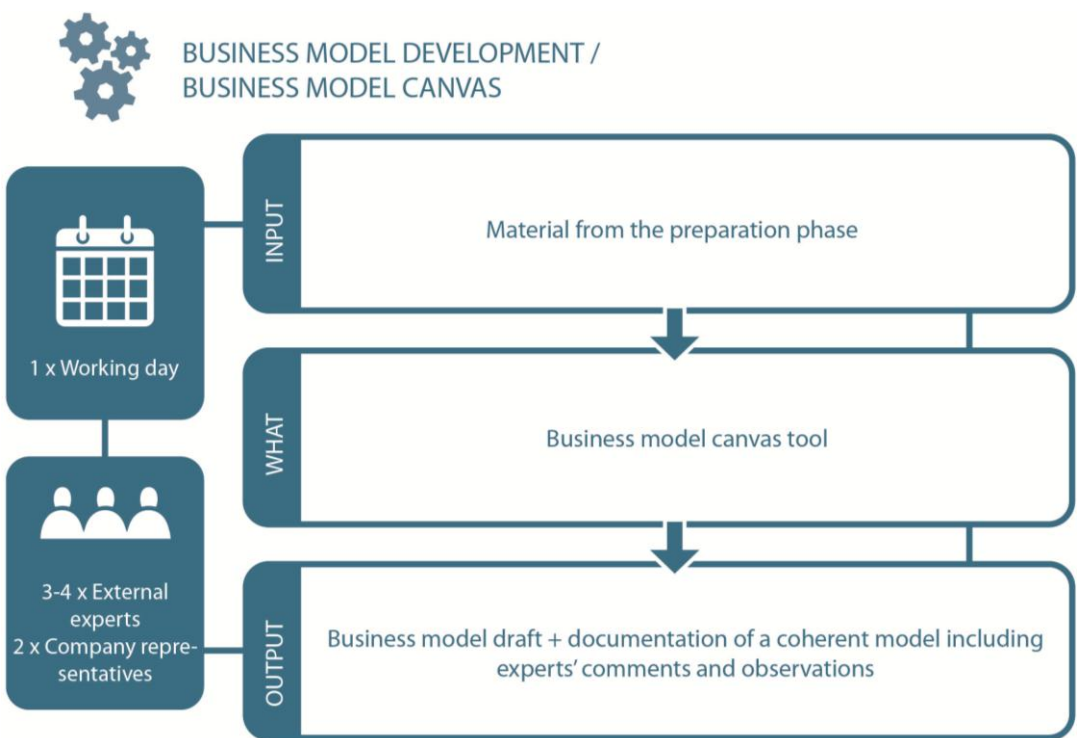
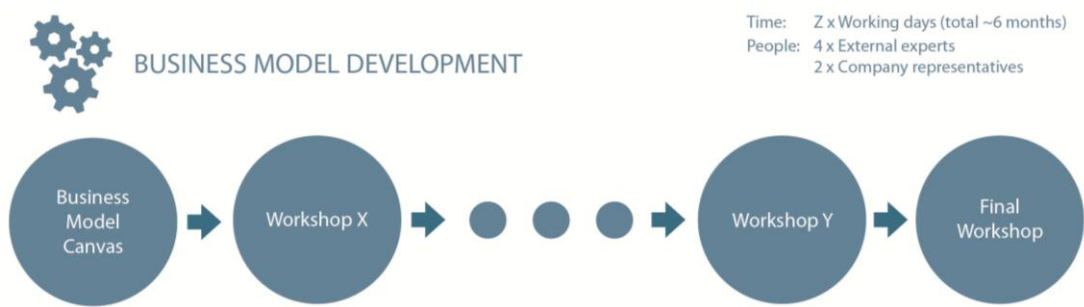
## Appendix 1: Business model renewal process map



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